



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

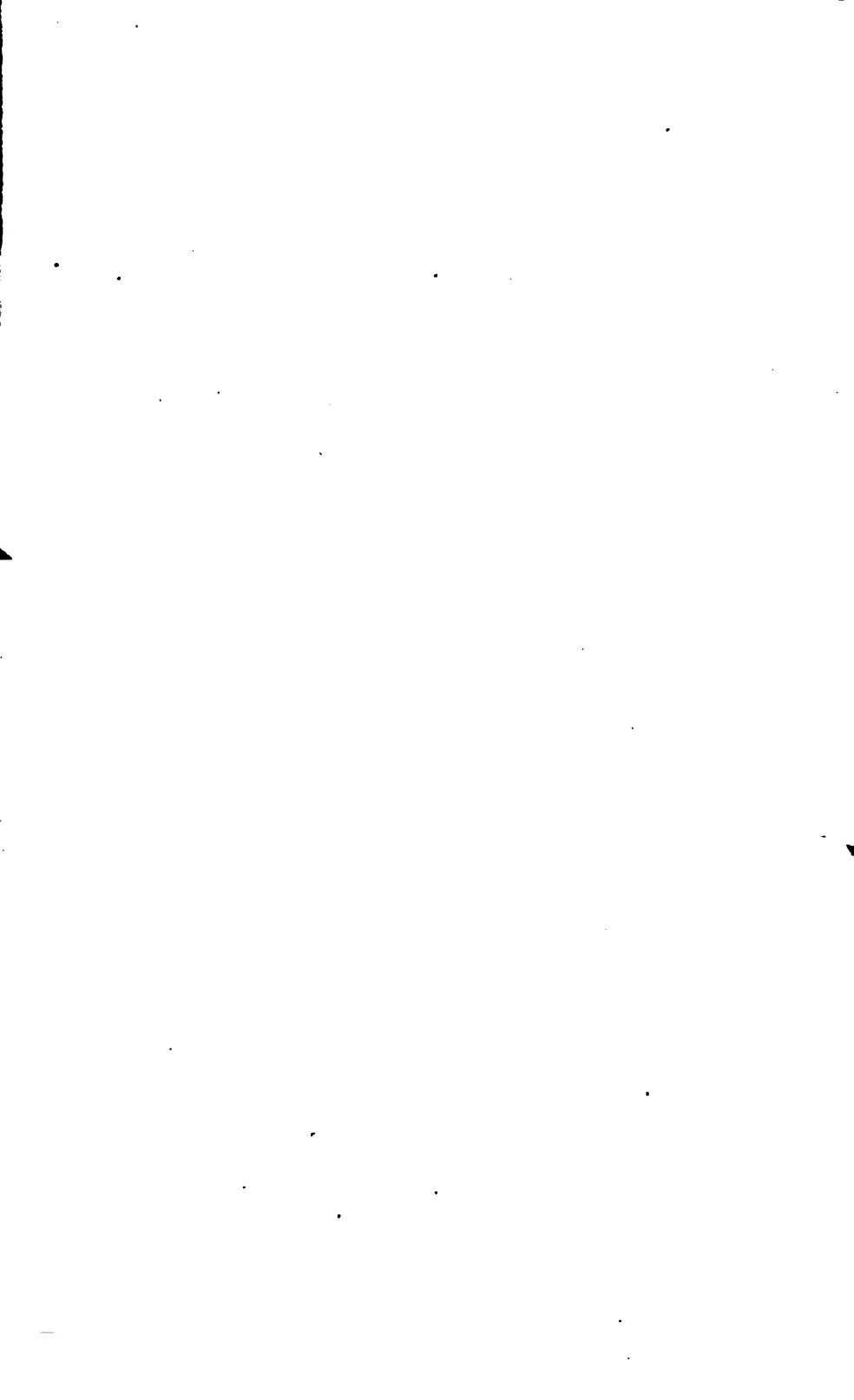
~~PERIODICAL ROOM.~~

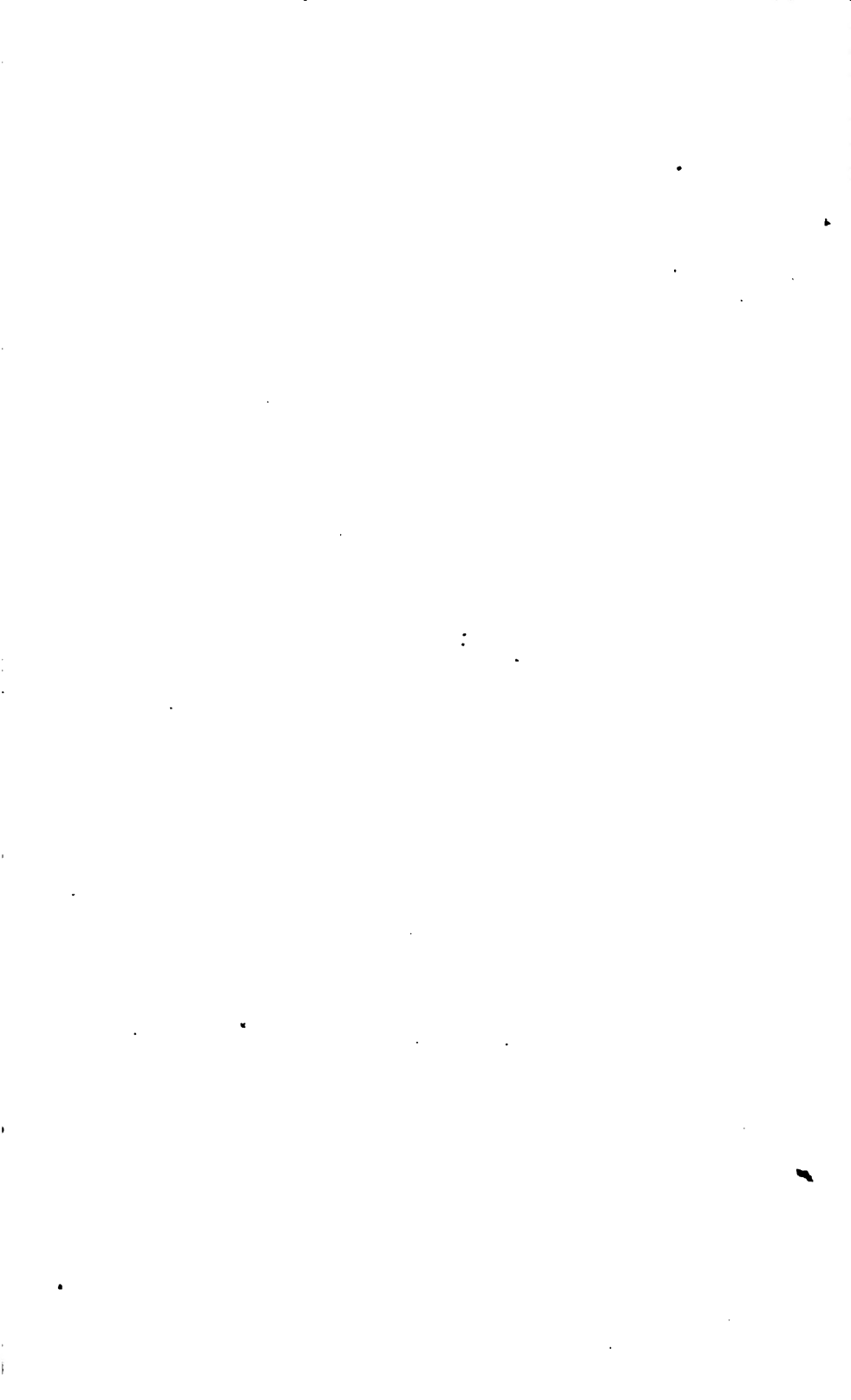
REESE LIBRARY
OF THE
UNIVERSITY OF CALIFORNIA.

Received

Feb. 1884

Accessions No. *23755* Shelf No.







Barnard's American Journal of Education.

AMERICAN JOURNAL OF EDUCATION.

To Subscribers for 1867:—

THE constant pressure of engagements connected with his withdrawal from the presidency of St. John's College, and with the organization of the Department of Education, together with a reluctance to announce the suspension or abandonment of the publication of a periodical whose whole aim and scope were in harmony with his present plan of operations as Commissioner of Education, and at the same time his conscious inability, in addition to his new labors, without essential help both in the business and editorial work, to comply with the urgent requests of many old subscribers to continue the publication until the whole field of systems, institutions and methods had been surveyed as was originally contemplated,—has, up to this time, prevented the undersigned both from issuing the numbers for March and June, and from making any explanation of the causes of the failure, or of his intentions for the future. He is now able to say that under the special management of Professor D. N. CAMP, as proprietor and publisher, and the general direction of its former editor, assisted by a large number of prominent teachers and educators in different parts of the country, the publication of the Journal will be continued.

HENRY BARNARD.

WASHINGTON, *June 8th*, 1867.

EDUC.
PSYCH.
LIBRARY



National Series.

THE

AMERICAN

Journal of Education.

EDITED BY

HENRY BARNARD, LL.D.,

U. S. COMMISSIONER OF EDUCATION.

VOLUME ONE



ENTIRE SERIES.—VOLUME XVII.

HARTFORD. D. N. CAMP.

NEW YORK: J. H. SCHERMERHORN & CO., 430 BROOME ST.

BOSTON: JOSEPH H. ALLEN, 203 WASHINGTON STREET,

LONDON: TURNER & CO., PATERNOSTER ROW.

1867.

EDUC.
PSYCH.
LIBRARY

L11
A15
J.17



NATIONAL SERIES.

The undersigned has assumed the heavy responsibility of continuing the publication of the AMERICAN JOURNAL OF EDUCATION on the same comprehensive plan on which it was projected in 1855, viz., "to embody the matured views and varied experience of wise statesmen, educators and teachers in perfecting the organization, administration, instruction and discipline of schools of every grade, under widely varying circumstances of government, society and religion;" and particularly to give in the National Series "an account of public schools and other institutions of learning, and educational movements generally, in the United States."

The first number of the National Series of the AMERICAN JOURNAL OF EDUCATION will be issued in September, 1867, and will be continued quarterly thereafter on the following


TERMS: For a single copy, one year, (Nos. 1, 2, 3, 4, N. S.,) . . . \$4.00
For a single number, 1.25

23756

EDUCATIONAL INTELLIGENCE.

To each subscriber of the AMERICAN JOURNAL OF EDUCATION will be sent the MONTHLY CIRCULAR of the Department of Education, which will contain not only such Circulars and information relating thereto as the Commissioner may have occasion to issue, but "notices in advance of the anniversary or special meetings of educational associations when authoritatively advised of the same; abstracts of the proceedings of educational meetings when officially communicated; discussion and action of constitutional conventions, legislatures, municipal bodies, boards of education, school committees, relating to schools and education; statistics, benefactions, and reliable items of educational movements in different States and countries."

D. N. CAMP.

 All communications relating to the Journal should be addressed to
AMERICAN JOURNAL OF EDUCATION, Hartford, Conn.

THE American Journal of Education.

[NATIONAL SERIES,]

No. I.—SEPTEMBER, 1867.

CONTENTS.

	PAGE.
PORTRAIT OF JAMES A. GARFIELD,.....	5
I. AMERICAN JOURNAL OF EDUCATION,.....	9
Original Prefaces, May, 1853, May, 1856, March, 1862,.....	9
Plan of Central Agency, Journal and Library of Education,.....	11
CLASSIFIED INDEX,.....	17
1. General Principles and History of Education,.....	18
2. Individual Views and Special Systems of Education,.....	19
3. Studies and Methods of Teaching; School Organization and Government,.....	27
4. Teachers and their Training; Normal and Model Schools; Teachers' Institutes,.....	29
5. State and National Systems of Instruction,.....	31
6. Secondary, Intermediate, Academical and High Schools,.....	32
7. University and Collegiate Education,.....	32
8. Special Schools and Departments of Science, Arts, Agriculture, Museums, &c.,.....	33
9. Military and Naval Education,.....	33
10. Preventive and Reformatory Education,.....	33
11. Education of the Deaf and Dumb, Blind, Idiots, &c.,.....	34
12. Moral and Religious Education; Sectarian Schools and Instruction,.....	35
13. Female Education,.....	35
14. Physical Education,.....	35
15. Supplementary, Self and Home Education; Libraries,.....	36
16. Educational Societies and Teachers' Associations,.....	36
17. Philology and Bibliography; School-books and Periodicals, &c.,.....	37
18. School Architecture,.....	37
19. Educational Endowments and Benefactors,.....	40
20. Miscellaneous,.....	40
21. Educational Biography and List of Portraits,.....	38
✓ II. EDUCATION RECOGNIZED AS A NATIONAL INTEREST,.....	41
Ordinance of 1785, Ordinance of 1787,.....	41
Constitution of the United States, Recommendations of President Washington,.....	41
Speech of James A. Garfield in the House of Representatives, 1866,.....	49
Act to Establish the Department of Education, March, 1867,.....	64
III. UNITED STATES EDUCATIONAL LAND POLICY,.....	65
Ordinance of the Congress of the Confederation, 1785,.....	67
United States Land Grants in Minnesota,.....	69
IV. SUGGESTIONS ON STUDIES AND CONDUCT BY MEN EMINENT IN AFFAIRS,.....	77
Advice of Sir Matthew Hale to his Grandchildren,.....	77
V. CONSTITUTIONAL PROVISION RESPECTING SCHOOLS AND EDUCATION,.....	81
✓ VI. EDUCATIONAL REFORM IN SILESIA BY FREDERICK II,.....	125
Letter of John Quincy Adams, dated Berlin, March 7, 1801,.....	125
✓ VII. PUBLIC INSTRUCTION IN AUSTRIA,.....	127
II. SECONDARY SCHOOLS,.....	127
VIII. SCHOOLS AS THEY WERE IN THE UNITED STATES,.....	185
✓ IX. ENGLISH PEDAGOGY—OLD AND NEW,.....	191
Memoir of Charles Hoole,.....	191
A NEW DISCOVERY OF THE OLD ART OF TEACHING, BY CHARLES HOOLE—1659,.....	195
I. THE PETTY SCHOOL,.....	195
X. EDUCATIONAL INTELLIGENCE,.....	208
Schedule of Information sought by the Commissioner of Education,.....	208

PUBLIC INSTRUCTION IN AUSTRIA.

	PAGE.
II. SECONDARY SCHOOLS,	129
1. <i>Historical Development,</i>	129
Latin Schools prior to Empress Maria Theresa,	129
Characteristic Features of the Schools of the Jesuits,	129
Piarists and their Gymnasiums—Benedictines,	130
Joseph I.—Charles VI.—Maria Theresa,	131
Gerhard von Swieten, 1747—State Board of Education, 1769,	131
Martini—Gratian Marx, 1775,	132
Joseph II.—Obedience to Authority—Corporal Punishment forbidden,	133
Leopold II.—Teachers' Association and Educational Session,	134
Francis I.—Rottenham and Board of Educational Reform—I. F. Lang,	135
Superintendent of Gymnasiums—Gymnasial Code, 1808,	136
Special Instruction of Teachers—Philosophical Departments,	137
Changes of 1824 and 1838—Baumgartner—Ficker,	138
Ferdinand I.—Hallaschka, 1837—Commission of 1841–44,	139
Statistics of 1828 and 1838—Feuchtersleben's Outlines,	140
Exner and the Reorganization of 1848—Hermann Bonitz,	141
Count Thun—Seminaries for Training Teachers—Religion,	142
Kleemann—Gymnasial Journal—Convention of Philologists, 1858,	143
Schmerling—Statistics of 1860—Hochegger,	143
2. <i>Present Organization of Gymnasiums,</i>	144
Classification—Complete—Incomplete—State—Ecclesiastical,	144
Language of Instruction—Supervision and Administration—State and Provincial,	145
Teachers—their Graduation—Duties—Appointment—Salaries—Pensions,	145
Course of Instruction—Latin—Greek—German—Geography and History,	148
Mathematics—Physics—Philosophy—Religion,	150
Optional Studies—Music—Drawing—Modern Languages, &c.,	152
Text-books, Apparatus and Salaries—Terms and Vacations—Admission—Tuition,	153
Discipline—Examination—Private Instruction—Funds and Expenditures,	156
3. <i>Results of Present System,</i>	157
III. REAL SCHOOLS,	160
1. <i>Historical Development,</i>	160
Mechanic Schools in 1757—Experimental Lectures on Physics and Mechanics, 1757,	160
Book-keeping—Schools for Apprentices, 1763—Real Commercial Academy, 1770,	160
Rottenham—Commercial and Trade Instruction, 1795,	160
Gertsner's Plan of Realistic Instruction, 1804,	161
Reorganization of Commercial Academy at Vienna, 1809,	161
Commercial Development—Real School at Prague, 1833,	171
Feuchtersleben's Plan of Lower Real School or Burgher School,	162
Real School at Prague, 1850, and Statute of 1851,	162
Statistics of Realistic Schools in 1858—Journal,	163
2. <i>Present Organization and Condition,</i>	163
Classification—Public—Imperial Royal—Communal—Private,	163
Language of Instruction—Administration, State and Provincial,	163
Teachers—Appointment, Number, Compensation, &c.,	164
Studies—Prescribed and Optional—Practical Course,	165
Regulations as to Classification, Text-books, Tuition Fees,	166
Examination of Candidates for Teacherships and Practice—Apprentice Schools,	167
3. <i>Results—compared with Gymnasiums,</i>	167
IV. PUBLIC INSTRUCTION IN HUNGARY, CROATIA, SLAVONIA,	169
Hungary—Population—Religion—Races—Luther's Reformation—Piarists—Jesuits,	170
Empress Maria Theresa—Normal School at Presburg, 1774,	170
School System of 1774—Expulsion of the Jesuits in 1780—New System in 1806,	171
Transylvania—Higher and Lower Schools in 1807—Condition of Education in 1841,	174
Revolution of 1848—Count Thun—Hungarian Jews,	175
Hungarian School Messenger—Legislature of 1851,	176
Teachers' Seminaries in 1853—Statutes of 1858,	177
Real Schools—Literary District Organization,	179
Croatia and Slavonia—Transylvania,	180
V. STATISTICAL TABLES,	182



I. THE AMERICAN JOURNAL OF EDUCATION.

DOCUMENTARY HISTORY.

ORIGINAL ANNOUNCEMENT.

Issued as a Circular in May, 1855, and published in August following, with the first number, and again with a Postscript in January, 1856.

In the great educational movement now going forward on this Continent, and especially throughout all the states in which the English language prevails, there has seemed for many years to the undersigned to exist, if not a demand, at least the want, not only of an American association of the friends of universal education, but of a series of publications, which should, on the one hand, embody the matured views and varied experience of wise statesmen, educators and teachers in perfecting the organization, administration, instruction and discipline of schools, of every grade, through a succession of years, under widely varying circumstances of government, society and religion; and on the other, should harmonize conflicting views, expose real deficiencies, excite to prudent and efficient action, and serve as a medium of free and frequent communication between the friends of education, in every portion of the great field.

In furtherance of these objects, a *Plan of Central Agency for the increase and diffusion* of knowledge on this subject was submitted to the American Association for the Advancement of Education, at its annual meeting in Washington in 1854. One feature of this plan was the publication of a Journal and Library of Education; the former to be issued in monthly or quarterly numbers, to embrace the current educational intelligence of the world, and the discussion of topics of immediate and pressing interest;—the latter to consist of a series of independent treatises, each devoted to the development of an important subject, or department, and embodying the reflections and experience of many minds, and the working and results of many institutions; and the whole, when complete, to constitute an Encyclopedia of Education. The plan was referred to a committee—considered and approved; and the Standing Committee were authorized to carry it into execution as far and as fast as the funds of the Association should admit. In the absence of any funds belonging to the Association, and of any pledge of pecuniary coöperation, on the part of

individuals, the Committee have not taken any steps to establish a central agency for the advancement of the objects for which the association was instituted, or felt authorized to provide for any publication beyond the proceedings of its last annual meeting. Under these circumstances, the undersigned has undertaken on his own responsibility, to carry out the original plan submitted by him, so far as relates to the publication both of the Journal, and the Library—relying on the annual subscription of individuals in different states, and interested in different allotments of the great field, who desire to be posted up in the current intelligence and discussion of schools and education, to meet the current expenses of the former; and on special contributions in aid of the latter, by persons or institutions interested in particular treatises, as their preparation shall be from time to time advanced and announced.

The First Number of the American Journal of Education will be issued in August, on terms which will be set forth by the publisher. As it will be devoted exclusively to the proceedings of the American Association for 1854, it will not present the usual variety and arrangement of topics, which will characterize the succeeding numbers.

The first treatise or volume of the Library of Education will be published in the course of 1856, under the following title, "NATIONAL EDUCATION IN THE UNITED STATES; or *Contributions to the History and Improvement of Common or Public Schools, and other means of Popular Education in the several States,*" on terms which will be hereafter announced.

HARTFORD, CONN., May, 1855.

HENRY BARNARD.

P. S. After much of the copy for this Number of the American Journal of Education was in type, a conference was held with the Rev. Abiel Peters, D. D., in reference to the plan of an Educational Journal contemplated by him under the title of The American College Review and Educational Journal, which has led to the combination of our respective plans, and a joint editorship of THE AMERICAN JOURNAL OF EDUCATION AND COLLEGE REVIEW.

NOTE TO NEW EDITION.—The agreement for the joint proprietorship and editorship of the American Journal of Education and College Review, having been dissolved by mutual consent and for mutual convenience, the undersigned has resumed the publication of the American Journal of Education on his original plan. A portion of the material intended for the first volume of the American Library of Education, will be published in the American Journal of Education.

Dr. PETERS will continue the publication of an educational periodical to which he has given the joint name.

H. B.

HARTFORD, January 7, 1856.

PLAN OF CENTRAL AGENCY

FOR THE ADVANCEMENT OF EDUCATION IN THE UNITED STATES.

The following Plan for "the Increase and Diffusion of Knowledge" of Education, and especially of Popular Education, and plans for its improvement, through the Smithsonian Institution; or the American Association for the Advancement of Education was submitted to the Association by Hon. Henry Barnard.

The Institution [or Association] to appoint a secretary or agent; with a salary, and to furnish a room for an office and depository of educational documents and apparatus, and beyond this not to be liable for any expense.

Agenda by the secretary or agent:

1. To devote himself exclusively to the "increase and diffusion of knowledge" on the subject of education, and especially of the condition and means of improving Popular Education, and particularly

2. To answer all personal or written inquiries on the subject, and collect and make available for use, information as to all advances made in the theory and practice of education in any one State or country.

3. To attend, as far as may be consistent with other requisitions on his time, and without charge to the funds of the institution, [or Association] Educational Conventions of a national and State character, for the purpose of collecting and disseminating information.

4. To edit a publication, to be entitled the American Journal and Library of Education, on the plan set forth in the accompanying paper (A.)

5. To collect

(a) Plans and models of school-houses and furniture.

(b) Specimens of maps and other material aids of education.

(c) Educational reports and documents from other States and countries.

6. To institute a system of educational exchange between literary institutions in this and other countries.

7. To make arrangements, and effect, if practicable, at least one meeting or conference of the friends of educational improvement in Washington [or elsewhere] every year.

8. To submit annually a report in which shall be given a summary of the progress of education, in each State, and as far as practicable, in every country

A.

PLAN OF PUBLICATION.—A quarterly or monthly issue under the general title of the AMERICAN JOURNAL AND LIBRARY OF EDUCATION.

I. A JOURNAL OF EDUCATION, to be issued in quarterly or monthly numbers, embracing articles on systems, institutions and methods of education, and the current intelligence of literature and education, and to make an octavo volume annually of at least 600 pages.

II. A LIBRARY OF EDUCATION; to consist of a series of independent treatises on the following [among other] subjects, to be issued in parts, and to be forwarded with the Journal to subscribers; the several parts or treatises to make an octavo volume of at least 600 pages per year.

1. A CATALOGUE of the best publications on the organization, instruction and discipline of schools, of every grade, and on the principles of education, in the English, French, and German languages.
2. A HISTORY OF EDUCATION, ancient and modern.
3. AN ACCOUNT OF ELEMENTARY INSTRUCTION IN EUROPE, based on the reports of Baehre, Stowe, Mann, and others.
4. NATIONAL EDUCATION IN THE UNITED STATES; or contributions to the history and improvement of common or public schools, and other institutions, means and agencies of popular education in the several States (B.)
5. SCHOOL ARCHITECTURE; or the principles of construction, ventilation, warming, acoustics, seating, &c., applied to school rooms, lecture halls, and class rooms, with illustrations.
6. NORMAL SCHOOLS, and other institutions, means and agencies for the professional training and improvement of teachers.
7. SYSTEM OF PUBLIC EDUCATION FOR LARGE CITIES AND VILLAGES, with an account of the schools and other means of popular education and recreation in the principal cities of Europe and in this country.
8. SYSTEM OF POPULAR EDUCATION FOR SPARSELY POPULATED DISTRICTS with an account of the schools in Norway and the agricultural portions of other countries.
9. SCHOOLS OF AGRICULTURE, and other means of advancing agricultural improvement
10. SCHOOLS OF SCIENCE applied to the mechanic arts, civil engineering, &c.
11. SCHOOLS OF TRADE, NAVIGATION, COMMERCE, &c.
12. FEMALE EDUCATION, with an account of the best seminaries for females in this country and in Europe.
13. INSTITUTIONS FOR ORPHANS.
14. SCHOOLS OF INDUSTRY, or institutions for truant, idle or neglected children, before they have been convicted of crime.
15. REFORM SCHOOLS, or institutions for young criminals.
16. HOUSES OF REFUGE, for adult criminals.
17. SECONDARY EDUCATION, including 1. institutions preparatory to college, and 2. institutions preparatory to special schools of agriculture, engineering, trade, navigation, &c.
18. COLLEGES AND UNIVERSITIES.
19. SCHOOLS OF THEOLOGY, LAW, AND MEDICINE.
20. MILITARY AND NAVAL SCHOOLS.
21. SUPPLEMENTARY EDUCATION, including adult schools, evening schools, courses of popular lectures, debating classes, mechanic institutes, &c.
22. LIBRARIES, with hints for the purchase, arrangement, catalogueing, drawing and preservation of books, especially in libraries designed for popular use.
23. INSTITUTIONS FOR THE DEAF AND DUMB, BLIND, AND IDIOTS.
24. SOCIETIES FOR THE ENCOURAGEMENT OF SCIENCE, THE ARTS AND EDUCATION.
25. PUBLIC MUSEUMS AND GALLERIES.
26. PUBLIC GARDENS, and other sources of popular recreation.
27. EDUCATIONAL TRACTS, or a series of short essays on topics of immediate practical importance to teachers and school officers.
28. EDUCATIONAL BIOGRAPHY, or the lives of distinguished educators and teachers.
29. EDUCATIONAL BENEFACTORS, or an account of the founders and benefactors of educational and scientific institutions.
30. SELF-EDUCATION; or hints for self-formation, with examples of the pursuit of knowledge under difficulties.
31. HOME EDUCATION; with illustrations drawn from the Family Training of different countries.
32. EDUCATIONAL NOMENCLATURE AND INDEX; or an explanation of words and terms used in describing the systems and institutions of education in different countries, with reference to the books where the subjects are discussed and treated of.

The Series, when complete, will constitute an **ENCYCLOPEDIA OF EDUCATION**.

Preface.

THE plan of a series of publications, embracing a periodical to be issued monthly or quarterly, devoted exclusively to the History, Discussion, and Statistics of Systems, Institutions, and Methods of Education, in different countries, with special reference to the condition and wants of our own, was formed by the undersigned in 1842, on the discontinuance of the first series of the Connecticut Common School Journal, commenced by him in August, 1838. In pursuance of this plan, several tracts and treatises on distinct topics connected with the organization, administration, and instruction of schools of different grades, and especially of public elementary schools, were prepared and published, and the material for others was collected by travel, correspondence, purchase, and exchange.

The further prosecution of the work was suspended in consequence of his accepting the office of Commissioner of Public Schools in Rhode Island, but was resumed in 1849, on his resigning the same. In 1850 the plan was brought without success before the American Institute of Instruction, at its annual meeting at Northampton, in connection with an agency for the promotion of education in New England. Having been induced to accept the office of Superintendent of Common Schools in Connecticut, for the purpose of reestablishing the educational policy which had been overthrown in 1842, the undersigned undertook to carry out his plan of publication by preparing a series of reports and documents, each devoted to one important subject, under authority of the Legislature. In this connection "Practical Illustrations of the Principles of School Architecture," "Normal Schools, and other Institutions, and Agencies for the Professional Training and Improvement of Teachers," and "National Education in Europe," were prepared and published. Finding that the anxieties and labors of office, combined with that general correspondence, and special research and reflection which the completion of the series required, were too much for his health, he resigned his office, and addressed himself to the execution of the latter. Failing to enlist either the Smithsonian Institution, or the American Association for the Advancement of Education, in the establishment of a Central Agency, the undersigned undertook, in March, 1855, on his own responsibility, the publication of a Journal and Library of Education. Arrangements were accordingly made in April, to print the first number of the American Journal of Education, in connection with the publication of the proceedings of the Association for 1854, to be issued on or before the first of August, 1855.

After much of the copy of Number One was in type, a conference was held with the Rev. Absalom Peters, D. D., who contemplated the publication of a periodical under the title of the American College Review, and Educational Magazine or Journal. This conference led to the combination of the two periodicals, and a joint editorship of the American Journal of Education and College Review. The first number was published in type, style and matter as prepared by the undersigned, with the adoption of the Prospectus already prepared by Dr. Peters for his magazine, modified, so as to merge the prominent feature of the College Review in the more comprehensive title of the American Journal of Education.

In the preparation of the second number, it became evident that two could not walk, or work together, unless they be agreed, and by mutual arrangement, and for mutual convenience, it was determined after the issue of that number, to discontinue the joint publication, leaving each party "the privilege of publishing an Educational Magazine, for which he was entitled to use the first and second number of the American Journal of Education and College Review, as number one and two of his work."

In the spirit and letter of this arrangement, as understood by him, the undersigned resumed the title and plan of his own Journal, and has completed the first volume by the publication of a number for March and for May, with this variation only, that he has given his subscribers more than he originally promised, and in the further prosecution of his work, shall include in the Journal much that he intended for chapters in some of the treatises which were to compose the Library of Education.

Should the Journal be sustained by a liberal subscription list, and should the health of the present editor admit of the requisite labor, it will be continued for a period of five years, or until the issue of ten volumes, conducted substantially on the plan of Volume I.

The editor will studiously avoid the insertion of all topics, or papers foreign to the great subject to which it is devoted, or of a single line or word calculated to injure intentionally the feelings of any faithful laborer in any allotment of the great field of American Education.

HENRY BARNARD.

HARTFORD, CONN., }
MAY 1, 1856. }

NEW SERIES.

WITH the Lumber for March, 1862, we shall commence a **NEW SERIES** of the **AMERICAN JOURNAL OF EDUCATION**, and with a moderate encouragement from the thoughtful and active friends of educational improvement, we shall continue our quarterly issues, until they have reached at least six volumes. We shall make no change in the general plan of this periodical. It will be devoted as from the start, exclusively to the History, Biography, Science, Art, Systems, Institutions, and Statistics of Education in different countries, with special reference to the condition and wants of our own. We shall studiously avoid the insertion of all papers foreign to these great subjects, or of a single line or word calculated to injure the feelings of any faithful laborer in any allotment of the great field of American Education. We leave the work of controversy to those who have more taste for it than we have, and shall labor diligently on the following points.

I. The History of Pedagogy, or the successive developments of human culture, both theoretical and practical, under the varying circumstances of race, climate, religion and government, as drawn from special treatises of teachers and educators in different languages, or as embodied in the manners, literature and history of each people.

In the development of this great theme, embracing many ages, races, and governments, we propose, not in precise chronological or ethnological order, but in papers prepared, from time to time, as our studies or those of our co-laborers may suggest, to show, to an extent which has not yet been attempted in the English language, what has been accomplished in the family and schools, by parents, teachers and educators, for the systematic training of children and youth :—

1. In the Eastern nations, before the birth of Christ—in China, India, Persia, Egypt, and Palestine—by Confucius, by the Vedas and Buddha, by Zoroaster and the Ptolemies, by Moses, David, Solomon, and the Rabbi.

2. Among the Greeks, at Crete, Sparta and Athens, under the institutions of Pythagoras, Lycurgus, and Solon, by poets and philosophers and teachers, by Homer, Socrates, Plato, Aristotle, and Plutarch.

3. Among the Romans, in the infancy, maturity and old age of Rome, by the didactics of Cato Seneca, Tacitus, the Plinys, Quintillian and Lucian.

4. Among modern nations as reached by the teachings of Christianity, in the gradual unfolding of the present received ideas of school organization, and of the principles and methods of instruction,—through (a) the peculiar organization and distinctive teaching of the early Christians; (b) the first popular school of the Christian Fathers, Chrysostom and Basil; (c) the Catechist schools of Clement and Origen; (d) the seminaries and cloister schools of Tertullian, Cyprian, Jerome and Austin; (e) the Monastic institutions of Benedict, Dominic and Francis; (f) the court schools and educational labors of Charlemagne and Alfred; (g) the modifications wrought by Arabic culture which followed the incursions of the Moors; (h) the rise and expansion of universities; (i) the demand of chivalry for a culture for man and woman distinct from that of the clergy, and of incorporated cities for schools independent of ecclesiastical authorities; (j) the revival of the languages, and the literature of Greece and Rome; (k) the long-protracted struggle between Humanism and Realism, or between, on the one hand, the study of languages for the purposes of general culture and the only preparation for professions in which language was the great instrument of study and influence, and on the other, the claims of Science, and of the realities surrounding every one, and with which every one has to do every day, in the affairs of peace or war; (l) and the gradual extension and expansion of the grand idea of universal education—of the education of every human being, and of every faculty of every human being, according to the circumstances and capabilities of each. While thus aiming to give in each number, contributions to the History of Pedagogy and the internal economy of schools, we hope in this series to complete our survey of—

II. Systems of National Education, and especially an account of Public Schools and other Means of Popular Education in each of the United States, and of all other governments on the American Continent.

III. The history and present condition of Normal Schools and other special institutions and agencies for the Professional Training and Improvement of Teachers.

IV. The organization and characteristic features of Polytechnic Schools, and other institutions for the education of persons destined for other pursuits than those of Law, Medicine and Theology, including a full account of Military Schools.

V. The history and courses of study of the oldest and best Colleges and Universities in different countries.

VI. The life and services of many Teachers, Promoters and Benefactors of Education, whose labors or benefactions are associated with the foundation and development of institutions, systems, and methods of instruction.

HENRY BARNARD.

Hartford, March, 1862.

CLASSIFIED INDEX

TO

BARNARD'S AMERICAN JOURNAL OF EDUCATION.

VOLUMES I. TO XVI.

CLASSIFICATION OF SUBJECTS.

- | | |
|---|--|
| I. General Principles and History of Education. | XI. Education of the Deaf and Dumb, Blind, Idiots, &c. |
| II. Individual Views and Special Systems of Education. | XII. Moral and Religious Education; Sectarian Schools and Instruction. |
| III. Studies and Methods of Teaching; School Organization and Government. | XIII. Female Education. |
| IV. Teachers and their Training; Normal and Model Schools; Teachers' Institutes. | XIV. Physical Education. |
| V. State and National Systems of Instruction. | XV. Supplementary, Self, and Home Education; Libraries. |
| VI. Secondary, Intermediate, Academical, and High Schools. | XVI. Educational Societies and Teachers' Associations. |
| VII. University and Collegiate Education. | XVII. Philology and Bibliography; School-books and Periodicals, &c. |
| VIII. Special Schools and Departments of Science, Arts, Agriculture, Museums, &c. | XVIII. School Architecture. |
| IX. Military and Naval Education. | XIX. Educational Endowments and Benefactors. |
| X. Preventive and Reformatory Education. | XX. Miscellaneous. |
| | XXI. Educational Biography and List of Portraits. |

CHAPTER I. GENERAL PRINCIPLES AND HISTORY OF EDUCATION.

- Education defined by Eminent Authorities; English, **XI**, 11-20; Greek, Roman, French, German, Scotch and American, **XIII**, 7-16.
- Educational Aphorisms and Suggestions, from Two Hundred Authorities, Ancient and Modern.—Man, his Dignity and Destiny, **VIII**, 9. Nature and Value of Education, **VIII**, 38. Duties of Parents and Teachers, **VIII**, 65. Early Home Training, **VIII**, 75-80; **XIII**, 79-92. Female Education, **XIII**, 232-242. Intellectual Culture in General, **X**, 116. Subjects and Means of Education, **X**, 141. Religious and Moral Instruction, **X**, 166. Discipline, **X**, 187. Example, **X**, 194-200. The State and Education, **XIII**, 717-724.
- Education, Nature and Objects of—Prize Essay, by John Lalor, **XVI**, 33-64.
- Education for the Times, by T. M. Clark, **II**, 375.
- Education a State Duty, by D. B. Duffield, **III**, 81.
- Education and the State; Aphorisms, **XIII**, 717-724. Views of Macaulay and Carlyle, **XIV**, 403. American Authorities, **XI**, 323; **XV**, 5.
- Education Preventive of Crime and Misery, by E. C. Tainsch, **XI**, 77-93.
- Home Education—Labors of W. Burton, **II**, 333.
- Intellectual Education, by William Russell.—The Perceptive Faculties, **II**, 113-144, 317-332. The Expressive Faculties, **III**, 47-64, 321-345. The Reflective Faculties, **IV**, 199-218, 309-342.
- Lectures on Education, by W. Knighton, **X**, 573.
- Misdirected Education and Insanity, by E. Jarvis, **IV**, 591-612.
- Moral and Mental Discipline, by Z. Richards, **I**, 107.
- Objects and Methods of Intellectual Education, by Francis Wayland, **XIII**, 801-816.
- Philosophy of Education, by Joseph Henry, **I**, 17-31.
- Philosophical Survey of Education, by Sir Henry Wotton, **XV**, 131-143.
- Problem of Education, by J. M. Gregory, **XIV**, 431.
- Powers to be Educated, by Thomas Hill, **XIV**, 81-92.
- Self-Education and College Education, by David Mason, **IV**, 262-271.
- Thoughts on Education, by Locke; Physical, **XI**, 461; Moral, **XIII**, 548; Intellectual, **XIV**, 705.
- Views and Plan of Education, by Krüsi, **V**, 187-197.
- Unconscious Taught, by F. D. Huntington, **I**, 141-163.
- Schools as they were Sixty Years Ago in United States, **XIII**, 123, 837; **XVI**, 331, 738; **XVII**.
- Progressive Development of Schools and Education in the United States, **XVII**.
- History of Education, from the German of Karl von Raumer, **IV**, 149. History of Education in Italy, **VII**, 413-460. Eminent Teachers in Germany and the Netherlands prior to the Fifteenth Century, **IV**, 714. Schlettstadt School, **V**, 65. School Life in the Fifteenth Century, **V**, 79. Early School Codes of Germany, **VI**, 426. Jesuits and their Schools, **V**, 213; **VI**, 615. Universities in the Sixteenth Century, **V**, 536. Verbal Realism, **V**, 655. School Reformers at Beginning of Seventeenth Century, **VI**, 459. Thirty Years' War, and the Century Following, **VII**, 367. Real Schools, **V**, 689. Reformatory Philologists, **V**, 741. Home and Private Instruction, **VII**, 381. Religious Instruction, **VII**, 401. Methods of Teaching Latin, **VI**, 581. Methods of Classical Instruction, **VII**, 471. Methods of Teaching Real Branches, **VIII**, 101-228. German Universities, **VI**, 9-65; **VII**, 47-152. Student Societies, **VII**, 160.
- Educational Development in Europe, by H. P. Tappan, **I**, 247-268.
- Hebrews, and their Education, by M. J. Raphael, **I**, 243.
- Greek Views of Education, Aristotle, **XIV**, 131; Lycurgus, and Spartan Education, **XIV**, 611; Plutarch, **XI**, 99.
- Roman Views of Education, Quintilian, **XI**, 3.
- Italian Views of Education and Schools, Acquaviva, **XIV**, 462; Boccaccio, **VII**, 422; Botta, **III**, 513; Dante and Petrarch, **VII**, 418; Picus, Politian, Valla, Vittorino, **VII**, 442; Rosmini, **IV**, 479.
- Dutch Views of Education, Agricola, **IV**, 717; Busch and Lange, **IV**, 726; Erasmus, **IV**, 729; Hieronymians, **IV**, 622; Reuchlin, **V**, 65; Wessel, **IV**, 714.
- French Views of Education and Schools, Fenelon, **XIII**, 477; Guizot, **XI**, 254, 357; Marcel, **XI**, 21; Montaigne, **IV**, 461; Rabelais, **XIV**, 147; Rousseau, **V**, 459; La Salle, **III**, 437.
- German Views of Education, Abbenrode, **IV**, 505, 512; Basedow, **V**, 487; Comenius, **V**, 257; Dieterweg, **IV**, 235, 505; Dinter, **VII**, 153; Felbiger, **IX**, 600; Fliehdner, **III**, 487; Franke, **V**, 481; Graser, **VI**, 575; Gutsmutz, **VII**, 191; Hamann, **VI**, 247; Hentschel, **VIII**, 633; Herder, **VI**, 195; Jacobs, **VI**, 612; Jahn, **VIII**, 196; Luther, **IV**, 421; Meinotto, **VI**, 609; Melancthon, **IV**, 741; Neander, **V**, 599; Overberg, **XIII**, 365; Ratich, **V**, 229; Raumer, **VII**, 200, 381; **VIII**, 101; **X**, 227, 613; Ruthardt, **VI**, 600; Sturm, **IV**, 167, 401; Tobler, **V**, 205; Trozendorf, **V**, 107; Von Turk, **V**, 155; Vogel, **IX**, 210; Wolf, **VI**, 260.
- Swiss Views of Education, Fellenberg, **III**, 594; Krüsi, **V**, 189; Pestalozzi, **III**, 401; **VII**, 513; Vehrli, **III**, 389.
- English Views of Education, Arnold, **IV**, 545; Ascham, **IV**, 155; Bacon, **XIII**, 103; Bell, **X**, 467; Colet, **XVI**, 657; Elyot, **XVI**, 485; Hale, **XVII**, Hartlib, **XI**, 191; Goldsmith, **XIII**, 347; Johnson, **XII**, 369; Lalor, **XVI**, 33; Lancaster and Bell, **X**, 355; Locke, **VI**, 209; **XI**, 461; **XIII**, 548; Mason, **IV**, 203; **XIV**, 262; Milton, **II**, 61; Mulcaster, **XVII**, 177; Spencer, **XI**, 445; Sedgwick, **XVII**; Temple, **F**, **XVII**; Whewell, **W**, **XVII**.
- Early Promoters of Realism in England, **XII**, 478. Bacon, **V**, 663; Cowley, **XII**, 651; Hoole, **XII**, 647; Petty, **XI**, 199.

II. INDIVIDUAL VIEWS AND SPECIAL SYSTEMS OF EDUCATION.

- Abbenrode. On Teaching History and Geography, **IV**, 505, 512.
- Abbot, G. D., and the Useful Knowledge Society, **XV**, 941. Educational Labors, **XVI**, 600.
- Ackland, Henry W. Natural Science and Physical Exercise in Schools, **XVII**.
- Acquariva, and the Ratio Studiorum, **XIV**, 462.
- Adams, John. Education and the State, **XV**, 12.
- Adams, J. Q. On Normal Schools, **I**, 589. Education and the State, **XV**, 12. Educational Reform in Silesia, **XVII**.
- Addison, Joseph. Education and Sculpture, **XI**, 16.
- Adelung, J. C. Philological Labors, **XI**, 451.
- Agassiz, L. Museum of Comparative Zoölogy, **IX**, 615.
- Agricola, Rudolf. Life and Opinions, **IV**, 717.
- Airy, G. B. Mathematics and Natural Science in Schools, **XVII**.
- Akerly, S. Deaf-mute Training, **III**, 348.
- Akroyd, E. Mode of Improving a Factory Population, **VIII**, 305.
- Albert, Prince. On Science and Art, **IV**, 813.
- Alcott, A. Bronson. School-days, **XVI**, 130.
- Alcott, William A. Educational Views, **IV**, 629. Plan of Village School, **IX**, 540.
- Allyn, Robert. Schools of Rhode Island, **II**, 544.
- Anderson, H. J. Schools of Physical Science, **I**, 515.
- Andrews, I. W. Educational Labors, **XVI**, 604.
- Andrews, L. Educational Labors, **XVI**, 604.
- Andrews, S. J. The Jesuits and their Schools, **XIV**, 455.
- Anthony, H. On Competitive Examinations at West Point, **XV**, 51.
- Aristotle, and his Educational Views, **XIV**, 131. Cited, **III**, 45; **IV**, 463; **V**, 673; **VII**, 415; **VIII**, 40-79; **X**, 132-195.
- Arnold, Matthew. Tribute to Guizot, **XI**, 281. Schools of Holland, **XIV**, 712.
- Arnold, Thomas, as a Teacher, **IV**, 545-581.
- Ascham, Roger. Biographical Sketch, **III**, 23. Toxophilus; the Schoole of Shootinge, **III**, 41. The Schoolmaster, **IV**, 155; **XI**, 57.
- Ashburton, Lord. Prize Scheme and Address on Teaching Common Things, **I**, 620.
- Austin, Sarah. Ends of a Good Education, **XI**, 90.
- Aventinus. Study of German, **XI**, 162.
- Bache, A. D. On a National University, **I**, 477. Education in Europe, **VIII**, 435, 444, 455, 564, 609; **IX**, 167, 210, 569; **XII**, 337; **XIII**, 303, 307.
- Bacon, Leonard. Life of James Hillhouse, **VI**, 325.
- Bacon, Lord. His Philosophy and its Influence upon Education, **V**, 663. Essays on Education, and Studies, with Annotations by Whately, **XIII**, 103.
- Bailey, Ebenezer. Memoir, **XII**, 429. Girls' High School in Boston in 1828, **XIII**, 259.
- Baker, T. B. L. Reformatory Education, **III**, 789.
- Baker, W. S. Itinerating School Agency, **I**, 729.
- Banks, N. P. Museum of Zoölogy, **IX**, 619.
- Bard, Samuel. Schools of Louisiana, **II**, 473.
- Barnard, D. D. Right of State to establish Schools, **XI**, 323. Memoir of S. Van Rensselaer, **VI**, 223.
- Barnard, F. A. P. Improvements in American Colleges, **I**, 269. Influence of Yale College, **V**, 723. Memoir, **V**, 753-780. Titles and Analysis of Publications, **V**, 763-769. Value of Classical Studies, **V**, 763. Open System of University Teaching, **V**, 765. Post-graduate Department, **V**, 775. Oral Teaching, **V**, 775.
- Barnard, H. Educational Labors in Connecticut from 1837 to 1842, **I**, 669; Speech in Legislature in 1838, 678; Address to the People of Connecticut, 670; Analysis of First Report in 1839, 674; Expenditures for School Purposes, 679; Measures and Results, 685; Schedule of Inquiries, 686; Topics of School Lectures, 709; Plan of State Institute, 721. Labors in Rhode Island from 1843 to 1849, **I**, 723; **XIV**, 558; Institute of Instruction, 559; Series of Educational Tracts, 567; Educational Libraries, 568; Correspondence with Committee of Teachers, 579. Labors in Connecticut from 1850 to 1854, **XV**, 276; Plan of Public High School, 279; Public and Parental Interest and Coöperation, 285; Legal Organization of Schools, 289; School Attendance, 293; Agricultural Districts, 303; Manufacturing Districts, 305; Cities, 309; Gradation of Schools, 318; Private versus Public Schools, 323; Teachers' Institutes, 387. Arguments for, **VIII**, 672. Normal Schools, **I**, 753; **X**, 15. Plan of Society, and Journal and Library of Education, **I**, 15, 134. Principles and Plans of School Architecture, **I**, 740; **IX**, 487; **X**, 695; **XII**, 701; **XIII**, 818; **XIV**, 780; **XV**, 783; **XVI**, 781. National Education in Europe, **I**, 745; **XV**, 329. Reports and Documents on Common Schools in Connecticut, **I**, 754, 761. Reports and Journal of Public Schools in Rhode Island, **I**, 755. Tribute to Gallaudet, **I**, 417, 759. Memoir of Ezekiel Cheever, **I**, 297, 769. Reformatory Schools and Education, **III**, 551, 819. Military Schools and Education, **XII**, 3-400. Naval and Navigation Schools, **XV**, 17, 65. Competitive Examination, **XI**, 103. Educational Aphorisms, **VIII**, 7; **XIII**, 7, 717. German Universities, **VI**, 9; **VII**, 49, 201. Books for the Teacher, **XIII**, 447. German Educational Reformers, **XIII**, 448. American Text-books, **XIII**, 209, 401, 628; **XIV**, 753; **XV**, 539. English Pedagogy, **XVI**, 467; Object Teaching and Primary Instruction in Great Britain, 469. Pestalozzi and Pestalozzianism, **VII**, 284, 502. National and State Educational Associations, **XVI**, 311; American College Education, 339. Standard Publications, **XVI**, 797; Progressive Development of Education in the United States, **XVII**; Educational Land Grants, **XVII**.
- Barnard, J. School-days in 1689, **I**, 307.
- Barnard, J. G. Treatise on the Gyroscope, **III**, 537; **IV**, 529; **V**, 298.

- Barney, H. H. Schools of Ohio, **II**, 531.
- Barrow, Isaac. Education defined, **XI**, 13.
- Basedow, and the Philanthropinum, **V**, 487-520.
- Bateman, N. Educational Labors, **XVI**, 165.
- Bates, S. P. On Liberal Education, **XV**, 155. Memoir, **XV**, 692.
- Bates, W. G. On Training of Teachers, **XVI**, 453.
- Becker, K. L. Study of Language, **XII**, 460.
- Beecher, Miss C. E. Physical Training, **II**, 399. Western Education, **XV**, 274.
- Beecher, Henry W. School Reminiscences, **XVI**, 135.
- Bell, Andrew, and the Madras System, **X**, 407.
- Benedict, St., and the Benedictines, **XVII**.
- Bencke, F. E. Pedagogical Views, **XVII**.
- Bernhardt. Teachers' Conferences, **XIII**, 277.
- Berranger. Training of Orphan Children, **III**, 736.
- Bingham, Caleb. Educational Labors, **V**, 325.
- Bishop, Nathan. Public Schools of Boston, **I**, 458. Girls' High School of Boston, **XI**, 263. Plans of Providence School-houses, **XI**, 582. Memoir, **XVII**.
- Blockman, Dr. Pestalozzi's Poor School at Neuhoß, **III**, 585.
- Boccaccio, and Educational Reform in Italy, **XII**, 418.
- Bodleigh, Sir T. On Travel, **XV**, 380.
- Bolingbroke. Genius and Experience, **XI**, 12.
- Booth, Rev. J. Popular Education in England, **III**, 252, 265. Competitive Examination, **III**, 257.
- Borgi, Jean, and Abandoned Orphans, **III**, 583.
- Botta, V. Public Instruction in Sardinia, **III**, 513; **IV**, 37, 479.
- Bowen, Francis. Life of Edmund Dwight, **IV**, 5.
- Braidwood, J. Education of Deaf-mutes, **III**, 348.
- Brainerd, T. Home and School Training in 1718, **XVI**, 331.
- Braun, T. Education defined, **XIII**, 10.
- Breckenridge, R. J. Schools of Kentucky, **II**, 488.
- Brinsley, J. Consolations for Grammar Schools, **I**, 311.
- Brockett, L. P. Idiots and their Training, **I**, 503. Institutions and Instruction for the Blind, **IV**, 127.
- Brooks, Charles. Best Methods of Teaching Morals, **I**, 336. Education of Teachers, **I**, 587.
- Brooks, K. Labors of Dr. Wayland, **XIII**, 771.
- Brougham, Lord. Life and Educational Views, **VI**, 467. Education and the State, **XIII**, 722. Training of the Orator, and Value of Eloquence, **XVI**, 187.
- Brown, Thomas. Education defined, **XIII**, 13.
- Brownson, O. A. Education defined, **XIII**, 12.
- Buckham, M. H. English Language in Society and School, **XIV**, 343. Plan of Study, **XVI**, 585.
- Buckingham, J. T. Schools as they were, **XIII**, 129.
- Bulkley, J. W. Teachers' Associations, **XV**, 185.
- Burgess, George. Thoughts on Religion and Public Schools, **II**, 562.
- Burke, Edmund. Education defined, **XI**, 17.
- Burrowes, T. H. Reports on Pennsylvania Schools, **VI**, 114, 556. History of Normal Schools in Pennsylvania, **XVI**, 195.
- Burton, W. District-school as it was, **III**, 456. Memoir, **XVI**, 330.
- Bushnell, Horace. Early Training, **XIII**, 79. Past-times, Plays, and Holidays, **XIII**, 93. Homespun Era of Common Schools, **XIII**, 142. The State and Education, **XIII**, 723.
- Buss, J., and Pestalozzianism, **VI**, 293.
- Byron, Lady. Girls' Reformatory School, **III**, 785.
- Cady, L. F. Classical Instruction, **XII**, 561.
- Caldwell, Charles. Education in North Carolina, **XVI**, 109.
- Calhoun, W. B. Memorial on Nor. Sch., **XVI**, 86.
- Calkins, N. A. Object Teaching, **XII**, 633.
- Carlyle, T. Education defined, **XIII**, 13. The State and Education, **XIV**, 406. Reading, **XVI**, 191. University Studies, **XVII**.
- Carpenter, Mary. Reformatory Education, **III**, 10, 785.
- Carpenter, W. B. Physical Science and Modern Languages in Schools, **XVII**.
- Carter, J. G. Life and Services, **V**, 409. Essay on Teachers' Seminaries, **XVI**, 71. Memorial, **XVI**, 80.
- Cecil, Sir William. Advice to his Son, **IX**, 161.
- Channing, W. E. Teachers and their Education, **XII**, 453. End of Education, **XIII**, 15.
- Chauveau, P. J. O. Education in Lower Canada, **II**, 728.
- Cheever, Ezekiel. Memoir and Educational Labors, **XII**, 531.
- Cheke, Sir John, **III**, 24.
- Chesterfield, Lord. Advice to his Son, **XVII**.
- Choate, Rufus. The Peabody Institute, **I**, 239.
- Christian Brothers, System of, **III**, 347.
- Cicero. Cited, **VIII**, 13, 14, 43, 79; **X**, 133, 151, 167, 184-196; **XII**, 409.
- Clajus, and the German Language, **XI**, 408.
- Clark, H. G. On Ventilation, **XV**, 787.
- Clark, T. M. Education for the Times, **II**, 376.
- Claxton, T. First Manufacturer of School Apparatus, **VIII**, 253.
- Clay, John. Juvenile Criminals, **III**, 773.
- Clerc, Laurent, **III**, 349.
- Clinton, DeWitt. Education of Teachers, **XIII**, 341.
- Cocker, E. Methods of Arithmetic, **XVII**.
- Coggeshall, W. J. Ohio System of Public Schools, **VI**, 81, 532.
- Colburn, Dana P. Memoir and Educational Work, **XI**, 229.
- Colburn, Warren. Educational Work, **II**, 194.
- Cole, David. On Classical Education, **I**, 67.
- Coleridge, D. St. Marks' Normal College, **X**, 531.
- Coleridge, S. T. The Teacher's Graces, **II**, 102.
- Colet, John. Educational Views and Influence, **XVI**, 657.
- Collis, J. D. Endowed Grammar Schools of England, **VIII**, 256.
- Colman, Henry. Agricultural School at Grignon, **VIII**, 555.
- Comenius, Amos. Educational Labors, **V**, 257-298. Orbis Pictus, **VI**, 585.
- Confucius. Cited, **VIII**, 10, 11; **X**, 132, 167.

- Coote, Edward. *The English Schoolmaster*, I, 309.
- Courteilles, Viscount de, and the Home Reformatory, III, 572, 647, 704.
- Cousin, V. School System of Holland, VIII, 506. School Law of Prussia, IX, 382. Normal Schools, XIII, 282.
- Coutts, Miss Burdett. Prize Scheme for Teaching Common Things, II, 708.
- Cowdery, M. F. Moral Training, XVI, 323.
- Cowley, A. Ptn of Philosophical College, XII, 651.
- Cowper, William. *The Tirocinium, or Review of Schools*, VIII, 469. Discipline, VIII, 480.
- Crabbe, George. Schools of the Borough, IV, 582; III, 461.
- Crosby, Alpheus. *Massachusetts Schools*, II, 508.
- Currie, James. *Methods of Early Education*, IX, 239-293.
- Curtis, A. G. Schools of Pennsylvania, II, 541.
- Cuvier, Baron. Schools of Holland, VIII, 597, 607.
- Dana, J. D. Science and Scientific Schools, II, 349.
- Dante, and the Revival of Education in Italy, VII, 418.
- Darlington, W. Schools as they were, XIII, 741.
- Dawson, J. W. Natural History in its Educational Aspects, III, 438.
- Day, Henry N. English Composition, XVI, 641.
- Day, Jeremiah. On Schools as they were, XVI, 126.
- Degerando, Baron. Monitorial Methods, X, 465.
- De la Salle, Abbe. Memoir, and System of Christian Schools, III, 437.
- De Lasse. Method and Motive of Instruction, VIII, 180.
- Deville, James. *The Village Schoolmaster*, III, 153.
- Demetz, M. Agricultural Colonies, I, 611; III, 572, 667.
- De Morgan. Arithmetics and their Authors, XVII, Bequest, I, 392.
- Dick. *Bequest*, I, 392.
- Diesterweg. Methods of Teaching, IV, 233, 505. School Discipline and Plans of Instruction, VIII, 616. Intuitional and Speaking Exercises, XII, 411.
- Dinter, G. F. Memoir and Educational Labors, VII, 153; XIV, 738. Defense of Catechetical Method, IX, 377.
- D'Israeli, I. Influence of Books and Authors, II, 226.
- Doane, G. W. The State and Education, XV, 5.
- Dole, Isaiah. Requirements in an English Lexicographer, III, 161. Mary Lyon, X, 649.
- Donaldson, J. W. University Teaching, XVI, Competition Tests, XVII, German and English Scholarship compared, XVII.
- Duportaux, M. Reports on Reform Schools, III, 677, 597, 599, 604, 716, 749.
- Duffield, D. B. Education a State Duty, III, 81.
- Dunn, H. Organization and Instruction of the Borough Road Schools, X, 381-450.
- Dunnell, M. H. Report on the Schools of Maine, II, 495.
- Dwight, Edmund. Memoir IV, 5.
- Dwight, Francis. Educational Labors, V, 608.
- Dwight, Mary. Art Education, II, 409, 587; III, 467; IV, 171; V, 305.
- Dwight, Timothy, as an Educator, V, 567.
- Eaton, H. School-houses of Vermont, XI, 510.
- Eberhard, J. J. Rural Reformatory School at Casa, III, 590.
- Edgeworth, Maria. Extract from Practical Education, XII, 602.
- Edson, T. Warren Colburn and his System of Arithmetic, II, 284.
- Edwards, N. W. Report on Schools of Illinois, II, 479.
- Edwards, Richard. Memoir of Tillinghast, II, 568. Normal Schools, XVI, 971.
- Elgin, Lord. Education in the United States and Canada, III, 239.
- Eliot, Samuel. Arnold as a Teacher, IV, 535.
- Eliot, S. A. Educational Benefactions of Boston, VIII, 522; IX, 606. History of Harvard College, IX, 129.
- Elyot, Sir Thomas. The Governour, XVI, 483.
- Emerson, G. B. Educational Labors, V, 417. Memorial on State Superintendent, V, 652. Memorial on Normal Schools, XVI, 93. Life of Felton, X, 265. Plan of School-houses, IX, 542.
- Epictetus. Cited, VIII, 11, 42; X, 132, 168.
- Erasmus. Educational Views, IV, 729; XVI, 681.
- Euclid, and the Method of Geometry, VIII, 155.
- Everett, Alexander H. Normal Schools, XVI, 88.
- Everett, Edward. Uses of Astronomy, II, 604. John Lowell and the Lowell Lectures, V, 437. Influence of Harvard, V, 531. Boston Library, VII, 266, 365. Female Education, IX, 635; XII, 721. Extracts from Addresses—Public Schools Fifty Years Ago—College Life—Common Schools and Colleges—Conditions of a Good School—Science and Popular Education—Moral Education—Popular Education—VII, 343; XV, 14. Life of Thomas Dowse, IX, 355.
- Faraday, M. Claims of Natural Science in a Liberal Education, XVII.
- Felbiger, J. I. Educational Labors in Austria, IX, 600.
- Fellenberg. Principles of Education, III, 594; X, 81; XIII, 11, 523.
- Felton, C. C. Characteristics of American Colleges, IX, 112. Memoir and Extracts, X, 265.
- Fenelon. Memoir and Educational Views, XIII, 477.
- Feuerbach, L. Intuition and Thinking in Education, XII, 422.
- Fichte. On Learning by Heart, XII, 416. Physical Culture, VIII, 192. Cited, VIII, 29, 620.
- Fletcher, J. Borough Road Normal School, X, 435-465.
- Fliedner. Institution for Deaconesses at Kaiserswerth, III, 487.
- Follenius, Karl. Relations to Karl Ludwig Sand, VI, 111, 125.
- Forbes, E. Educational Uses of Museums, IV, 788.

- Fowle, W. B. *Memoir and School Improvements*, **X**, 600.
- Francké, A. H. *His Views and Labors*, **V**, 441.
- Franklin, B. *His Interest in Higher Education*, **VII**, 268; **VIII**, 251; **X**, 283.
- Friesen, F., and the German Gymnastics, **VIII**, 197.
- Fröbel, and the Kindergarten System, **II**, 449; **IV**, 257, 793.
- Fuller, Thomas. *The Good Schoolmaster*, **III**, 155.
- Gallaudet, T. H. *Life and Services*, **I**, 425. *Education of Teachers*, **X**, 16.
- Galloway, Samuel. *Teachers' Institute*, **XV**, 401. *Memoir*, **XVI**, 583.
- Gammell, W. *Memoir of Nicholas Brown*, **III**, 291.
- Gardner, Francis. *Boston Latin School*, **XII**, 553.
- Garfield, J. A. *Department of Education*, **XVII**.
- Gerard-Groote, and the Hieronymians, **IV**, 623.
- Gesner, J. M. *Educational Views*, **V**, 741; **VI**, 583.
- Gibbs, J. W. *Philological Contributions*, **II**, 198; **III**, 101-124.
- Gillilan. *The Scotch School-dame*, **III**, 456.
- Gillespie, W. M. *Mathematical Methods of the Ecole Polytechnique*, **I**, 533; **II**, 177.
- Gilman, D. C. *Scientific Schools of Europe*, **I**, 315. *Higher Special Schools of France*, **II**, 93.
- Gladstone, W. E. *The Classics in a Liberal Education*, **XVII**.
- Goethe. *Educational Views*, **VIII**, 20, 619, 648; **X**, 51, 161, 199, 225, 617, 621.
- Goldsmith. *Essay on Education*, **XIII**, 347. *The Village Schoolmaster*, **III**, 158.
- Goodrich, S. G. *Schools as they were*, **XIII**, 134.
- Goodwin, F. J. *Norwich Free Academy*, **III**, 195.
- Gordon, John. *Normal Schools of Scotland*, **X**, 583.
- Gottsched, J. C. *German Grammar*, **XI**, 447.
- Gould, B. A. *An American University*, **II**, 285-293.
- Graser. *System of Instruction*, **VI**, 575.
- Gray, Thomas. *Alliance of Education and Government*, **VIII**, 287. *Ode on Eton College*, **VIII**, 285.
- Green, L. W. *Normal Schools for Kentucky*, **III**, 217.
- Green, S. S. *Educational Duties of the Hour*, **XVI**, 229. *Object Teaching*, **XVI**, 245.
- Gregory, J. M. *The Problem of Education*, **XIV**, 431-5. *Memoir*, **XV**, 643.
- Grimké, T. S. *Plan of Study*, **II**, 230.
- Grimm, the Brothers. **XI**, 454.
- Grimshaw, A. H. *Schools of Delaware*, **II**, 474.
- Griscom, John. *Memoir and Educational Labors*, **VIII**, 324.
- Grote, J. *Education defined*, **XI**, 18.
- Guilford, Nathan. *Educational Labors*, **VIII**, 289.
- Guizot. *Ministry of Public Instruction in France*, **XI**, 254, 357. *The State and Education*, **XIII**, 718.
- Gulliver, J. P. *Norwich Free Academy*, **II**, 665.
- Gute-Muths. *System of Physical Training*, **VIII**, 191. *Training of the Senses*, **VIII**, 297.
- Haddock, C. B. *School-houses in New Hampshire*, **IX**, 512.
- Hale, R. *Continental Reformatories*, **III**, 642, 744.
- Hale, Sir Matthew. *Plan of Study*, **XVII**.
- Hall, E. E. *Life of Edward Everett*, **VII**, 325.
- Hall, S. R. *Educational Labors*, **V**, 373. *Teachers' Seminary at Andover*, **V**, 368.
- Hall, W. *On Schools as they were*, **XVI**, 127.
- Halsey, L. J. *Life of Philip Lindsay*, **VII**, 9.
- Hamann, J. G. *Educational Views*, **VI**, 247.
- Hamilton, J., and the Hamiltonian Method, **VI**, 586.
- Hamilton, Sir W. *Education defined*, **XI**, 18; **XIII**, 13. *On Mathematics*, **XVII**.
- Hammill, S. M. *School Government*, **I**, 123.
- Hammood, C. *On N. England Academies*, **XVI**, 403.
- Harnisch. Cited, **VIII**, 58. *Plan of Instruction for: Annaberg Orphan House*, **VIII**, 437.
- Harris, James. *Education a Growth*, **XI**, 16.
- Hart, J. S. *Study of the Anglo-Saxon*, **I**, 33-66. *Memoir and Views*, **V**, 91.
- Hartlib. *Plan of College of Husbandry in 1681*, **XI**, 191, 649. *Memoir*, **XII**, 649.
- Haskins, G. F. *Reformatory School at Rome*, **III**, 580.
- Haupt. *The Burschenschaften of the German Universities*, **VII**, 161.
- Häyly, V., and the Instruction of the Blind, **III**, 477; **IV**, 130.
- Haven, Joseph. *Mental Science as a Study*, **III**, 125.
- Hawley, Gideon. *Memoir and Labors*, **XI**, 94.
- Hedge, N. *On Schools as they were*, **XVI**, 738.
- Hedge. *On University Reform*, **XVII**.
- Hegius. *Educational Views*, **IV**, 723.
- Helps, Arthur. *Learning and Doing*, **XI**, 18.
- Henfrey, A. *Study of Botany*, **XVII**.
- Henry, Joseph. *Philosophy of Education*, **I**, 17.
- Hentschel, E. *Singing*, **VIII**, 633; *Drawing*, **X**, 59.
- Herbert, J. F. *Pedagogical Views*, **XVII**.
- Herder. *Life and Educational Views*, **VI**, 193.
- Herschel, Sir J. F. W. *On Reading*, **XVII**.
- Heyder, W. *Address at Jena in 1807*, **VI**, 56.
- Hickson, E. H. *The State and Education*, **XIII**, 718.
- Hill, M. D. *Preventive Treatment of Crime*, **III**, 766.
- Hill, Thomas. *True Order of Studies*, **VI**, 180, 449; **VII**, 273, 491. *Powers to be Educated*, **XIV**, 81. *Didactics in Colleges*, **XV**, 177.
- Hillard, G. S. *Public Library of Boston*, **II**, 203.
- The State and Education*, **XV**, 14.
- Hillhouse, James A. *Education and Literature in a Republic*, **XVII**.
- Hintz, E. *Natural History*, **IV**, 241.
- Hobbs, Thomas. *Knowledge and Experience*, **XI**, 14.
- Hodgins, J. G. *Popular Education in Canada*, **I**, 186.
- Holbrook, Josiah. *The Lyceum System*, **XIV**, 535. *Educational Labors*, **VIII**, 229.
- Holla, G. C. *Family Reformatories*, **IV**, 824.
- Honcamp. *Instruction in Reading*, **IV**, 234; *Larguage*, **XII**, 482.
- Hood, Thomas. *The Irish Schoolmaster*, **IV**, 183.
- Hooker, J. *Study of Botany in Schools*, **XVI**, 463.
- Hooker, Richard. *Knowledge of and Obedience to Law*, **XI**, 13.

- Hoole, C., and Object Teaching in 1658, **XII**, 647.
Old Art of Teaching, **XVII**.
- Hopkins, Mark. Memoir and Educational Publications, **XI**, 225. Extracts—Education—Self-education—Female Education—Academies—Medical Science—Theological Education—Objections to Colleges—Taste and Morals—**XI**, 225-231.
- Hornberg, T. Thoughts on the Education of Girls, **VIII**, 319.
- Hovey, C. E. Memoir and Labors, **VIII**, 94.
- Howe, S. G. Laura Bridgman's Education, **IV**, 383. Summary of Labors, **XI**, 399.
- Hubbs, P. K. Schools of California, **II**, 467.
- Hubbard, J. O. Normal Schools in New York, **XIII**, 345.
- Humphrey, Heman. Normal Schools, **XII**, 655. Schools as they were, **XIII**, 125.
- Huntington, F. D. Unconscious Tuition, **I**, 141. Public Prayers in Colleges, **IV**, 22.
- Ickelsamer, V., and the German Language, **XI**, 402.
- Ingraham, J. Plan of Primary School-house, **X**, 719.
- Jackson, W. L. Schools of Virginia, **II**, 557.
- Jacobs, F. Method of Teaching Latin, **VI**, 612.
- Jacotot, I., and his Method, **VI**, 295; **XII**, 604.
- Jahn, F. L. German Turning System and Physical Education, **VII**, 196; **XV**, 229.
- Jameson, Mrs. Social Position and Occupations of Woman, **III**, 495.
- Jarvis, E. Misdirected Education and Insanity, **IV**, 591.
- Jay, John. Education and the State, **XV**, 13.
- Jefferson, T. The State and Education, **XV**, 12.
- Jerome, St. On Female Education, **V**, 593.
- Jewell, F. S. Teaching as a Profession, **XV**, 570.
- John of Ravenna. Educational Views, **VII**, 435.
- Johnson, Samuel. Thoughts on Education and Conduct, **XIII**, 359.
- Johnson, W. R. Educational Labors, **V**, 799.
- Julius, Dr. Normal Schools in Prussia, **XVI**, 89.
- Kant. Cited, **V**, 504; **VIII**, 28, 48; **X**, 135, 137, 191, 641; **XIII**, 13.
- Kay, J. P. Training of Parochial Schoolmasters, **IX**, 170.
- Kay, Joseph. Subjects and Methods of Primary Instruction, **VIII**, 416. Position of Prussian Teachers, **XI**, 169. Normal Schools in Saxony, **XIII**, 594.
- Keenan, P. J. Monitorial System in Ireland, **X**, 462; **XIII**, 150. School Organization, **XIII**, 145.
- Kepler. Estimate of Euclid, **VIII**, 159.
- Kingsbury, John. Young Ladies' High School at Providence, **V**, 16.
- Kingley, J. L. Discourse on Yale College, **V**, 541.
- Klützel. History of Tübingen University, **IX**, 57.
- Knight, Charles. Economical Science, **IX**, 105.
- Knighton, W. Educational Lectures, **X**, 573.
- Krug. Cited, **VIII**, 23, 60; **X**, 122, 123, 133.
- Krüsi. Life and Educational Labors, **V**, 161-186.
- Kurati, M. Reform School at Bachtelen, **III**, 596.
- Lactantius. Cited, **X**, 168.
- Lalor, J. Nature and Objects of Education, **XVI**, 33-64.
- Lancaster, Joseph, and Monitorial Schools, **X**, 355.
- Landon, W. S. Roger Ascham and Lady Jane Grey, **III**, 39.
- Lange, R. Educational Labors, **IV**, 726.
- Lathrop, J. Boston Association of Teachers, **XV**, 530.
- Leach, Daniel. Public Schools of Providence, **I**, 468. Plan of School-houses, **IX**, 563.
- Leibnitz. Cited, **VIII**, 57; **X**, 133, 134, 168.
- Leigh, Lord. Reformatory Results of Mettray, **III**, 731.
- Lewis, Dio. The New Gymnastics, **XI**, 531; **XII**, 665.
- Lewis, Tayler. Methods of Teaching Greek and Latin, **I**, 285, 489.
- Lieber, F. The Cooper Institute, **I**, 652. History of Athensums, **II**, 735.
- Lindley, Phillip. Memoir and Views of Education, **VII**, 96.
- Ling, H., and the Swedish Gymnastics, **XV**, 236.
- Lloyd, Robert. The School Usher, **III**, 160.
- Locke, John. Views on Education, **VI**, 209. Thoughts on Education, **XI**, 461; **XIII**, 548; **XIV**, 305. School of Labor, **III**, 577.
- Locke, W. Ragged Schools, **III**, 779.
- Longstreet. School Scene in Georgia, **XVI**, 121.
- Lord, A. D. Plan of School-house, **IX**, 562. Educational Labors, **XVI**, 607.
- Lothrop, S. K. W. Lawrence and the Academies of New England, **II**, 33.
- Lovell, John. Eulogy on Peter Faneuil, **IX**, 604.
- Loyola, and his Society and System, **V**, 213; **XIV**, 455.
- Lubinus. Grammatical Instruction, **VI**, 581.
- Luther. Views on Education, **IV**, 421-449. Physical Culture, **VIII**, 190. Cited, **VIII**, 15, 78, 356; **X**, 137, 141, 151, 163, 183, 191.
- Lycurgus, and Education among the Spartans, **XIV**, 611.
- Lyell, Sir Charles. Physical Science in a Liberal Education, **XVII**.
- Lyon, Mary. Principles of Mt. Holyoke Seminary, **X**, 670.
- Lytton, Sir E. B. Address at School Festival, **III**, 259.
- Macaulay, Lord T. B. The State and Education, **XIII**, 721; **XIV**, 403. Competitive Examinations for East India Service, **XVII**.
- Madison, James. The State and Education, **XV**, 12.
- Mausfeld, E. D. The Military Academy at West Point, **XIII**, 17-48.
- Marcel, C. Conversational Method, **XI**, 21, 330.
- March, F. A. Study of English Language, **XVI**, 599.
- Marion, General. On Free Schools, **XVI**, 119.

- Mann, Horace. Teachers' Motives, **XIV**, 277. College Government, **III**, 65. Special Training a Pre-requisite to Teaching, **XIII**, 507. Methods of Education in Germany, **VIII**, 382. Results of Normal Schools in Prussia, **VIII**, 361. Analysis of Reports, **V**, 623. Plan of District School-house, **IX**, 642. Estimate of S. G. Howe, **XI**, 389. Education defined, **XIII**, 16. The State and Education, **XIII**, 724; **XV**, 13. Normal Schools, **XVI**, 100.
- Mason, S. W. Physical Exercise in Schools, **XIV**, 61.
- Masson, D. College and Self-education, **IV**, 262.
- Milton's Home, School, and College Training, **XIV**, 159-190.
- Mathews, J. D. Report on Schools of Kentucky, **II**, 493.
- May, S. J. Life and Views of Cyrus Peirce, **IV**, 275. Educational Labors, **XVI**, 141.
- Mayhew, Ira. School-houses of Michigan, **IX**, 515. Educational Labors, **XV**, 631.
- McElligott, J. N. Debating as a Means of Educational Discipline, **I**, 495.
- Meierotto. Method of Teaching Latin, **VI**, 609. Physical Culture, **VIII**, 191.
- Méring. On the Hamiltonian System, **VI**, 592.
- Melancthon. Life and Educational Services, **IV**, 741-764.
- Memminger, C. G. Schools of South Carolina, **II**, 553.
- Mill, John Stuart. State and Education, **XIII**, 721. University Education, **XVII**.
- Mills, Caleb. Report on Schools of Indiana, **II**, 480.
- Milton. Treatise on Education, **II**, 61. Education defined, **XI**, 12. The State and Education, **XIII**, 719. His Home, School, and College Training, **XIV**, 159.
- Molineux, E. L. Physical and Military Exercises in Schools a National Necessity, **XI**, 513.
- Montaigne. On Learning and Education, **IV**, 461.
- Montucla. Elements of Euclid, **VIII**, 156.
- More, Sir Thomas. The State and Education, **XIII**, 719. Education of his Children, **XVII**.
- Morrison, T. Manual of School Management, **IX**, 294. Oral Lessons, **IX**, 321.
- Moecheresch. Cited, **VIII**, 71; **X**, 190, 198.
- Moseley, Canon. Tripartite System of Instruction, **IX**, 316. English Training Colleges, **X**, 543-670.
- Mulcaster, R. Positions, **XVII**.
- Muller, Max. French and German in Public Schools, **XVII**.
- Neander, Michel. Educational Labors, **V**, 599.
- Niebuhr, B. S. Letter to a Student, **XVI**, 215.
- Niebuhr, J., and Pestalozzi, **VII**, 289.
- Niemeyer. Cited, **VIII**, 52, 56, 61, 67, 71; **X**, 118.
- Nieuwenhuysen, and the Society for the Public Good in Holland, **XIV**, 641.
- Nissen, H. Public Schools in Norway, **VIII**, 295.
- Oberlin, John Friedrich. The Practical Educator, **V**, 505; **XVII**.
- Oelinger, Albert, and the Study of German, **XI**, 406.
- Olmsted, Dennison. Democratic Tendencies of Science, **I**, 164. Ideal of a Teacher; Timothy Dwight **V**, 567.
- Osgood, S. G. Address at Dedication of School-house, **XIII**, 848.
- Overberg, B. Educational Views, **XIII**, 365.
- Owen, R. Natural History in Public Schools, **XVII**.
- Page, D. P. Memoir and Processes of Teaching, **V**, 819. Education defined, **XIII**, 14.
- Paget, J. Physiology, **XVII**, 119.
- Paley, Dr. Education defined, **XI**, 15.
- Palmerston, Lord. Popular Education, **II**, 712.
- Park, Prof. The School of Locality, **XVI**, 331. Memoir of B. B. Edwards, **XIV**, 381.
- Parr, Samuel. Principles of Education, **XI**, 17.
- Partridge, Alden. Educational Views, **XIII**, 54, 683.
- Pattison. On Prussian Normal Schools, **XVI**, 395.
- Paulet. System of Monitorial Instruction, **X**, 464.
- Payson, T. Boston Association of Teachers, **XV**, 533; **X**, 464.
- Peabody, George. Public Library of Baltimore, **III**.
- Peel, Sir R. Study of Classics, **XVII**, 236. Educational Benefactions, **XVII**.
- Peet, H. P. New York Institution for the Deaf and Dumb, **III**, 347. Memoir, **III**, 366.
- Peirce, B. K. Reformatory for Girls, **XVI**, 652.
- Peirce, Cyrus. Ideal of Education, **IV**, 285. Normal Schools, **IV**, 306.
- Perkins, G. E. Labors in Normal Schools, **XIII**, 544.
- Perry, Gardner. On School-houses, **IX**, 520.
- Perry, W. F. Schools of Alabama, **II**, 465.
- Pestalozzi. Life and Educational System, **III**, 401; **IV**, 65. Pestalozzi and the Schools of Germany, **IX**, 343. Pestalozzi, Fellenberg, and Wehrli, **X**, 81. Poor School at Neuhoß, **III**, 585. His Assistants and Disciples, **VII**, 285. Hundredth Birthday, **V**, 503. Publications by and relating to, **VII**, 513. Selections from his Publications, **VII**, 519-722. Evening Hours of a Hermit, **VI**, 160. Leonard and Gertrude, **VII**, 519. Christopher and Alice, **VII**, 665. His Account of his Educational Experience and Methods, **VII**, 671.
- Petrarch, and Education in Italy, **VII**, 424.
- Petty, Sir W. Plan of a Trades School, 1647, **XI**, 190.
- Peurbach, G. Method of Arithmetic, **VIII**, 170.
- Phelps, W. F. Normal Schools, **III**, 417. Educational Labors, **V**, 7.
- Philbrick, J. D. On the National Teachers' Association, **XIV**, 49. Extracts from Reports, **II**, 261. Report on Schools of Connecticut, **II**, 469. Plans of School-houses, **X**, 740; **XVI**, 701.
- Phillips, J. H. Schools of New Jersey, **II**, 517.
- Picket, A. Teachers' Association, **XV**, 493.
- Pierce, Benjamin. On a National University, **II**, 88.
- Pierpont, J. Public High School for Girls, **XIII**, 244.
- Pitt, Earl of Chatham. Studies and Conduct, **XVII**.
- Plato. Cited, **IV**, 166; **VIII**, 11, 43, 76-78; **X**, 141, 157, 162, 167, 170, 194; **XI**, 101, 105; **XIII**, 409; **XIII**, 8.

- Platarch. Views of Education, **XI** 99-110. Cited, **VIII** 77; **X** 118-195.
- Poggius, and Education in Italy, **VII** 442.
- Porter, J. A. Plan of an Agricultural School, **I** 329.
- Porter, Noah. Essay on Educational Reform in Connecticut, **XIV** 244. Norwich Free Academy, **III** 300.
- Potter, Alonzo. Consolidation, &c., of American Colleges, **I** 471. Moral and Religious Instruction, **II** 169. School Houses in New York, **IX** 507. Normal Schools, **XIII** 344. What and How to Read, **II** 215. Memoir, **XVI** 569.
- Pullicino, and Education in Italy, **II** 721.
- Pythagoras. Cited, **VIII** 11, 12, 33, 43; **X** 132, 162, 166; **XI** 109; **XIII** 8, 81.
- Quincy, Josiah. Girls' High School in Boston, **XIII** 297. Phillips' Academy in 1778, **XIII** 740.
- Quincy, Josiah, Jr. School Policy of Boston, **XII** 706.
- Quintilian. Views of Education, **XI** 3.
- Rabelais, and his Educational Views, **XIV** 147.
- Ramsauer. Memoir, **VII** 301. Life at Hofwyl, **IV** 84, 119.
- Ramaden. The Heart of a Nation, **XI** 17.
- Ramusat. Circular to Teachers, adopted by Guizot, **XI** 278.
- Randall, S. S. On Francis Dwight, **V** 809. Josiah Holbrook. Educational Labors, **XIII** 287. New York Normal School, **XIII** 532.
- Raphall, H. L. Education among the Hebrews, **I** 243.
- Ratieh. Life and Educational Methods, **V** 229; **XI** 418. On Teaching Latin, **VI** 580.
- Raumer, Karl von. History of Education, q. v. under SECTION I. German Universities, **VI** 9; **VII** 47, 160. Essays on University Reform, **VII** 200.
- Raumer, Rudolf. Instruction in the German Language, **XI** 155, 419-420; **XII** 460-527.
- Ravaisson, F. Instruction in Drawing, **II** 319.
- Reid, D. B. College of Architecture, **II** 629.
- Reisch, Gregorius. Margarita Philosophica, **XVII**. Roman System of Measures, **XVII**.
- Rendu, Eugen. Public Instruction in France and Prussia, **II** 337.
- Reuchlin, and German Educators of the Fifteenth Century, **V** 65.
- Rice, V. M. Schools of New York, **II** 518.
- Richard, W. F. Methods in the National Schools of England, **X** 501-540.
- Richards, Z. Discipline, **I** 107. The Teacher an Artist, **XIV** 69.
- Richter, J. P. Cited, **VIII** 27, 50, 618; **X** 119-199.
- Rickoff, A. J. National Bureau of Education, **XVI** 299.
- Rider, Captain. On System of Navigation Schools, **XV** 67.
- Rosenkrantz. Present Age to the Educator, **XII** 425.
- Rosmini, A. Philosophy of Pedagogy, **IV** 491.
- Ross, William. Catechetical Method, **IX** 368.
- Ross, W. P. Education among the Chenkees, **I** 120.
- Rousseau, and his Educational Views, **V** 459-486. Education defined, **XIII** 11.
- Rush, Benjamin. The State and Education, **XV** 13.
- Ruskin, John. Material of Education, **XI** 19.
- Russell, William. Principles and Methods of Intellectual Education, **II** 113, 317; **III** 47, 311; **IV** 199. Moral Education, **IX** 19-48. National Organization of Teachers, **XIV** 7. Educational Labors of Lowell Mason, **IV** 141. Recollections of Josiah Holbrook, **VIII** 339. Legal Recognition of Teaching as a Profession, **X** 297.
- Russell, W. H. Plan of Gymnasium, **IX** 534.
- Ruthardt, J. C. Method of Teaching Latin and Greek, **VI** 600.
- Sarmiento, D. F. The Schoolmaster's Work, **XVI** 65. Basis of U. S. prosperity, **XVI** 533. Educational Labors, **XVI** 593.
- Schmid, Joseph, and Pestalozzi, **VII** 297.
- Schmidt. Definition of Education, **XIII** 9.
- Schottelius, J. G. Philological Labors, **XI** 429.
- Schwartz. Cited, **VIII** 34, 53; **X** 104.
- Senar, Barnas. Schools of Massachusetts, **II** 498.
- Sears, E. I. Henry Lord Brugham, **V** 467. Memoir. Sedgwick, C. M. What and How to Read, **II** 215.
- Seguin, E. Treatment and Training of Idiots, **II** 145.
- Seneca. Cited, **VIII** 12-68; **X** 135-196; **XII** 409.
- Seton, S. S. Extracts from Manual, **XIII** 852.
- Shea, J. G. Catholic Institutions in the U. S., 435.
- Shearman, F. W. Schools in Michigan, **II** 510.
- Sheldon, E. A. Object Teaching, **XIV** 93.
- Shenstone, William. The Schoolmistress, with Annotations, **III** 449.
- Shurtleff, N. B. Boston Latin School, **XII** 559.
- Shuttleworth, Sir J. K. Educational Progress in England, **III** 245. Vehrli, **III** 392. Training Schools, **IX** 171-200.
- Sidney, Sir H. On Conduct, **XV** 378.
- Simonson, L. Cadet System in Switzerland, **XIII** 603.
- Simpson, J. Education defined, **XIII** 13.
- Slade, William. Education at the West, **XV** 374.
- Smith, Adam. The State and Education, **XIII** 790.
- Smith, B. B. Visit to Radleigh School, **IV** 803.
- Smith, Elbridge. Norwich Free Academy, **III** 208.
- Smith, Goldwin. History, **XVII** 119.
- Smith, H. B. The Dutch Universities, **I** 387.
- Smyth, Sidney. Objects of Education, **XIII** 12.
- Snell, E. S. The Gyroscope, **II** 701.
- Socrates. Cited, **IV** 156; **VIII** 77; **X** 167, 187; **XI** 61, 62, 103, 107. Methods of Philosophy, **X** 378.
- South, R. Educational Views, **XVII**.
- Southey, Robert. The State and Education, **XIII** 719. Views of Home Education, **XVI** 433. Conduct and Knowledge, **XVI** 223.
- Spencer, Herbert. Thoughts on Education, **XI** 485-512; **XIII** 372-400.
- Spencer, J. C. Education of Teachers, **XIII** 342.

- Sprague, W. B. Influence of Yale College, **X**, 681.
- Spurzheim. Mutual Instruction, **X**, 611. Education defined, **XIII**, 11.
- Stanley, Lord. Lyceums and Popular Edu., **III**, 241.
- Stephens, L. Normal Schools of Prussia, **VIII**, 368.
- Stewart, Dugald. Objects of Education, **XIII**, 13.
- Stifter, Michael, and Algebraic Signs, **XVI**.
- Stiles, W. H. Education in Georgia, **II**, 477.
- Stow, David. Gallery Training Lessons **IX**, 413.
- Stowe, C. E. Life and Labors, **V**, 586. Educational Wants of Ohio, **V**, 588. Primary Instruction in Germany, **VIII**, 371. Teachers' Seminary, **XV**, 688.
- Sturm, J. Life and Educational Labors, **IV**, 167, 401.
- Sullivan, O. Teaching the Alphabet, **XII**, 601.
- Premiums for Knowledge in Com. Things, **X**, 93.
- Swett, John. Educational Labors, **XVI**, 625, 790.
- Swift, J. On Manners, **XVII**.
- Tafel, L. The Hamiltonian System, **VI**, 591.
- Tappan, H. P. Educational Development in Europe, **I**, 247-268. Educational Labors, **XIII**, 432.
- Tarbox, I. N. Statistics of New England Colleges, **I**, 405. American Education Society, **XIV**, 367.
- Tasso. Memoir and Educational Views, **XVII**.
- Temple, F. Literature and Science, **XVII**.
- Tenney, Jonathan. Schools of New Hampshire, **II**, 511. Memoir, **XVI**, 761.
- Teutleben, K. von, and Society of Usefulness, **XI**, 424.
- Thaer, August, and Gymnastics, **VIII**, 197.
- Thayer, G. F. Letters to a Young Teacher, **I**, 357; **II**, 103, 391, 657; **III**, 71, 313; **IV**, 219, 450; **VI**, 435; **VIII**, 81. Chauncey Hall School, **XIII**, 851.
- Thayer, S. Competitive Examination, **XV**, 58.
- Thibaut. On Purity in Music, **X**, 635.
- Thompson, A. Industrial School, **III**, 780.
- Tice, J. H. Public Schools of St. Louis, **I**, 348.
- Tillinghast, Nicholas. As an Educator, **II**, 568. On Normal Schools, **XVI**, 453.
- Timbs, John. Endowed Schools of England, **VIII**, 261. The Hornbook, **XII**, 687.
- Tixier, J. School Dialogues, **XVI**, 445.
- Tobler, J. G. Methods of Teaching, **V**, 210.
- Town, Salem. Schools as they were, **XIII**, 737.
- Trask, A. B. Town School of Dorchester, **XVI**, 105.
- Trench, R. English Language, **XVII**.
- Trotzendorf, V. F. Educational Views, **V**, 107.
- Turk, R. C. W. von, **V**, 155.
- Turner, Sydney. Reformatory Schools, **III**, 772.
- Tyndall. Study of Physics, **XVII**.
- Vail, T. H. Methods of Using Books, **II**, 215.
- Vassar, M. Plan of Vassar Female College, **XI**, 55.
- Vehrlil. Hofwyl and Krutzlingen, **III**, 399; **X**, 81.
- Verplanck, J. C. Memoir of D. H. Barnes, **XIV**, 513. Scientific Knowledge and Business, **V**, 116.
- Vinci, Leonardo di. Drawing, **II**, 425.
- Wadsworth, James. Labors of Education, **V**, 395.
- Watts, Isaac. Improvement of the Mind, **II**, 215.
- Webster, Daniel. Normal Schools, **I**, 590. Free Schools, **I**, 591. Education defined, **XIII**, 14.
- Wayland, Francis. Objects and Methods of Intellectual Education, **XIII**, 801. Dedictory Address at Pawtucket, **VIII**, 843. Educational Labors and Publications, **XIII**, 771. Extracts on Method of Recitation—System of University Education—System of Public Schools for a City—The Library in Popular Education—Theological Education—Moses Stuart—Dr. Nott—Thomas K. Arnold—**XIII**, 776.
- Webster, Noah. Schools as they were, **XIII**, 123.
- Weld, Theodore D., and Manual Labor, **XV**, 234.
- Wells, W. H. Life and Educational Labors, **VIII**, 529. Teachers' Conferences, **XIII**, 272. Teaching English Grammar, **XV**, 241. Exercises on Retiring from Chicago High School, **XIV**, 811.
- Wessel, John. Educational Views, **IV**, 714.
- Whately, Archbishop. Annotations on Bacon, **XIII**, 103. Education defined, **XI**, 18.
- Whewell, W. Education defined, **XI**, 11. School Studies and University Examinations, **XVII**.
- White, E. E. National Bureau of Edu., **XVI**, 177.
- White, H. R. The Village Matron, **III**, 460.
- White, S. H. National Bureau of Edu., **XV**, 180.
- Wichern, T. H. Reformatory Education, **III**, 5, 603.
- Wickersham, J. P. Education as an Element of Reconstruction of the Union, **XVI**, 283.
- Wilbur, H. B. On Object Teaching, **XV**, 189.
- Widerspin, S. Infant School, **IX**, 531; **XIII**, 163.
- Wiley, C. H. Schools of North Carolina, **II**, 527.
- Willard, Mrs. Emma. Female Education, **VI**, 125. Female Association, **XV**, 612.
- Willm, J. The Monitorial System, **X**, 466. Teachers' Libraries, **XIII**, 293, 298.
- Wimmer, H. Public Instruction in Saxony, **V**, 350; **IX**, 201. Educational Intelligence, **III**, 272; **IV**, 243, 793. On Real Schools of Austria, **III**, 275.
- Winthrop, R. C. Free Schools, **I**, 645.
- Wise, Henry A. Schools of Virginia, **II**, 557.
- Wiseman, Cardinal. Education of the Poor, **XVII**.
- Wohlfarth, J. F. F. Pedagogical Treasure Casket, **VIII**, 8-80; **X**, 116-290.
- Wolf, T. A. Educational Views, **VI**, 660.
- Wolsey, Cardinal. Plan for Grammar School, **VII**, 487.
- Woodbridge, W. Suggestions on School Improvements, **XV**, 609. Reminiscences of Female Education prior to 1801, **XVI**, 137.
- Woodbridge, W. C. Life and Educational Labors, **V**, 51. Education defined, **XIII**, 16.
- Woolsey, T. D. Historical Discourse on Yale College, **V**, 546. Norwich Free Academy, **III**, 197.
- Wordsworth, W. State and Education, **XIII**, 719.
- Wotton, Sir Henry. Survey of Educa., **XV**, 123-143.
- Wyatt, Sir T. On Conduct, **XV**, 376.
- Wykeham, and Winchester College, **VIII**, 261.
- Young, Samuel. Schools of New York, **IX**, 505.
- Young, T. U. Infant School Teaching, **XII**, 155.
- Zeller, C. H. Teachings of Experience for Christian Schools, **III**, 386. Memoir, **VII**, 305.
- Zoroaster. Cited, **X**, 167.
- Zachokke. Cited, **VIII**, 21, 30, 51; **X**, 149-198.

III. STUDIES AND METHODS; SCHOOL ORGANIZATION AND DISCIPLINE.

- A B C-shooters, V. 90, 603; books, XII. 583.
 Absence, II. 444, 504; V. 631; XV. 283.
 Academy, plan for, XVI. 403.
 Accuracy, XIII. 515.
 Acquisition, XIII. 512.
 Acting plays, IV. 175; VII. 503; XIV. 474.
 Activity, independent, VIII. 617; XIII. 13, 376.
 Adult education, I. 634; VIII. 230; XVI. 343.
 Advice to Students on Studies and Conduct, XIII. 193; XV. 377; XVI. 186, 216, 223. Lord Bacon, XVI. 186; Sir Thomas Bodleigh, XV. 381; Lord Brougham, XVI. 186; Carlyle, XVI. 191; Sir Matthew Hale, XVII. 216; Niebuhr, XVI. 216; Sir H. Sidney, XV. 379; Southey, XVI. 233; Vail, II. 915; Whately, XIII. 106; Wyatt, XV. 377.
 Algebra, II. 177.
 Alphabet, Modes of Teaching, XII. 593.
 Amusements, III. 42; V. 449; X. 256; XIII. 93; XIV. 474.
 • Analysis and Analytic Method, II. 122, 133; IV. 505; VIII. 169; IX. 205.
 Anger, XI. 482, 504.
 Anglo-Saxon Language, I. 33; XVI. 588.
 Anthropology, XIII. 327.
 Aphorisms on Studies and Conduct, XV. 376; Subjects of Instruction, X. 141; Discipline, X. 187; Early Training, XIII. 79.
 Appetites, X. 137; XIII. 512, 578; XVI. 53.
 Aptness to teach, XIII. 769.
 Archery, III. 41; XVI. 496.
 Architectural Game, XI. 27.
 Arithmetic, Currie, IX. 247; Hill, VI. 454; Gillespie, I. 539; Raumer, VIII. 170; Richards, X. 534.
 Art—as a Study, by Miss A. M. Dwight, II. 409, 587; III. 467; IV. 191; V. 305.
 Art and Science, by Dana, II. 349; Raumer, X. 218.
 Attendance, Barnard, XV. 293.
 Ball-frame, IX. 255; XI. 24.
 Basew's Methods, V. 487.
 Beans in Arithmetic, VI. 454.
 Beating of Children, IV. 156, 165; V. 509; XI. 479.
 Bible, II. 613; Arnold, IV. 443; Locke, XII. 471; XIV. 308; Luther, IV. 443; Raumer, VII. 402; VIII. 104; Whately, XIII. 108.
 Bifurcation, XII. 47.
 Biographical Method in History, IV. 514, 577.
 Biology, XIII. 392.
 Bipartite Organization, XIII. 150.
 Birch, III. 462; V. 509.
 Blackboard or surface, V. 499; X. 600; XII. 648; XIII. 32.
 Blocks in Geometry, VI. 451.
 Books, Value of, II. 205, 215; X. 158; XIII. 788; XVI. 191.
 Book-learning, II. 561; VII. 267, 306; XIII. 637.
 Borough-road School Methods, X. 281.
 Botany, VII. 296; VIII. 196; IX. 77, 109; X. 640; XI. 46.
 Boy-tutors, XVI. 227.
 Burgher, or Citizens' School, VIII. 414; IX. 210, 384; XI. 248; XII. 520.
 Benschenschaff, VII. 80, 91, 165.
 Calisthenics, II. 405.
 Catechism on Methods, from Diesterweg, IV. 233, 505.
 Catechetical Method, W. Roes, IX. 387.
 Character, X. 129; XIII. 571.
 Chemistry, V. 712; VII. 277; VIII. 665; XI. 210; XIII. 391.
 Childhood, IV. 424; V. 467; VII. 382; XI. 483; XII. 629; XVI. 193.
 Chiding, XIII. 559.
 Church-cross-row, XVII. 195.
 Christianity in Schools, I. 251; II. 567, 693; IV. 527, 572; V. 77; XIII. 118, 267, 325.
 Christmas Festival, X. 260; XIII. 95.
 Chronological Method, IV. 515.
 City Influence, III. 323. VII. 33, 240; VIII. 143; XV. 309.
 Classical Instruction, by Ascham, XI. 70; I. Cady, XII. 561; David Cole, I. 67; Erasmus, IV. 729; T. Lewis, I. 285; Raumer, VII. 471; Sturm, IV. 169; Wooley, VII. 487.
 Collective Teaching, X. 205.
 Common Things, by Lord Ashburton, I. 629; Morrison, IX. 321; Stow, IX. 413; Specimen Lessons, X. 105, 575; IX. 349.
 Competitive Examination, by Barnard, XIV. 108; Booth, III. 267.
 Common Sense, V. 476; XIII. 599.
 Composition, III. 331; VIII. 287; X. 415; XI. 122; XII. 494; XIV. 363; XVI. 641.
 Compulsion in attendance, XI. 266; in study, VII. 213; XIII. 373.
 Conduct, IV. 161; X. 141; XIII. 79; XV. 123, 378; XVI. 191.
 Conversation, XI. 106, 339; XIII. 556; XIV. 380; XV. 152; XVI. 682.
 Conversational Method, by Marcel, XI. 106, 339.
 Constructive Method, by Abbenrode, IV. 507.
 Corporal Punishment, Bell, X. 486; Diesterweg, XIII. 619; Erasmus, XVI. 680; Goldsmith, XIII. 352; Johnson, XIII. 363; Locke, XIII. 563; Austria, XVI. 614, 690; England, III. 157.
 Country Training, III. 323; V. 472; X. 644; XIII. 141; XV. 303.
 Counters, VIII. 182.
 Courage, IX. 41; X. 57; XIII. 584; XVI. 57.
 Crime and Education, IV. 579; VI. 311, 494; XI. 77.
 Curiosity, II. 118; V. 477; XIII. 112, 572.
 Debating, by J. M. Elligott, I. 495.
 Discipline, by Diesterweg, VIII. 619; Locke, XIII. 557; Hamill, I. 139; Spencer, XI. 498; Thayer, VI. 435; XIII. 831; Dorchester School in 1845, XVI. 106; Hopkins Grammar School, 1884, IV. 710.
 Drawing, by Heitschel, X. 50; Ravaisson, II. 419.

- English Language and Literature, by Buckham, **XIV**, 343; **XVI**, 556; Day, **XVI**, 641; Gibbs, **II**, 193; **III**, 101; Hart, **I**, 33; Felton, **X**, 284; March, **XVI**, 568; Wells, **XV**, 145.
- Fagging in English Schools, **IV**, 569; **V**, 80; **XV**, 107.
- French Language, **XV**, 772.
- German Language, **XI**, 155, 400; **XII**, 460.
- Geography—Methods of Teaching, by Abbenrode, **IV**, 505; Currie, **IX**, 269; Dunn, **X**, 421; Hill, **VII**, 275; Key, **IX**, 186; Mann, **VIII**, 390; Marcel, **XI**, 35; Pestalozzi, **X**, 150; Phelps, **IX**, 62; Raumer, **VIII**, 3; Thayer, **VIII**, 81.
- Geometry, Basedow, **V**, 512; Diesterweg, **IV**, 239; Euclid, **VIII**, 135; Gillespie, **I**, 541; Hill, **VI**, 191, 449; Raumer, **VIII**, 155; Spencer, **XIII**, 383.
- Geology, **IV**, 763; **VI**, 238; **VII**, 71, 203; **VIII**, 241; **XI**, 46.
- Gradation of Schools, **II**, 455.
- Greek Language, **XII**, 561; **I**, 284, 482.
- Grouping Method in History, **IV**, 515.
- Gymnastics, Lewis' System, **XI**, 531; **XII**, 665.
- History, Method in, by Abbenrode, **IV**, 512; **XII**, 665; Arnold, **IV**, 565; Basedow, **V**, 503; Hill, **VI**, 184; **VII**, 490; Marcel, **XI**, 41; Niemeyer, **X**, 156; Raumer, **VIII**, 101; **X**, 641; Richter, **X**, 154; Whately, **XIII**, 119.
- Intellectual Training, by Elliot, **XVI**, 488; Fellenberg, **III**, 594; Goldsmith, **XIII**, 347; Hill, **VI**, 180; Krüsi, **V**, 187; Lalor, **XVI**, 40; Locke, **XIV**, 305; Milton, **II**, 79; Montaigne, **IV**, 161; Pestalozzi, **VII**, 512; Quintilian, **XI**, 3; Raumer, **VIII**, 81; Rousseau, **V**, 459; Russell, **II**, 112; Spencer, **XI**, 484; **XIII**, 372; Wayland, **XIII**, 801.
- Infant Schools and Instruction, Currie, **IX**, 228; Froebel, **II**, 449; **IV**, 237; Home and Colonial Society, **XIII**, 78; Marcel, **XI**, 21; Prussian Schools, **VIII**, 371; Raumer, **VII**, 381; Young, **XIV**, 165.
- Intuitive Instruction, **IV**, 233; **XII**, 411.
- Italian Language, **VII**, 434, 459.
- Itinerant Schools, **VIII**, 296.
- Jesuit System of Schools, **V**, 212; **XIV**, 455.
- Kindergarten, **IV**, 257.
- Lacedæmonian System, **III**, 85; **XIV**, 612.
- Lancasterian System, **X**, 402.
- Latin Language, by Acquaviva, **XIV**, 462; Arnold, **IV**, 564; Asham, **XI**, 70; Bates, **XV**, 155; Comenius, **VI**, 585; Erasmus, **IV**, 729; Gesner, **V**, 744; **VI**, 583; Hamilton, **VI**, 586; Herder, **VI**, 207; Hoole, **XVII**, 225; Jacotot, **VI**, 595; Jacobs, **VI**, 612; Locke, **XIV**, 311; Luther, **IV**, 44; Melancthon, **IV**, 755, 764; Meierotto, **VI**, 583, 609; Meiring, **VI**, 592; Milton, **II**, 79; Montaigne, **IV**, 473; **VI**, 584; Ratich, **V**, 234; **VI**, 586; Raumer, **VI**, 581; **VII**, 471; Rousseau, **V**, 473; Ruthardt, **VI**, 600; Sturm, **IV**, 169; **VI**, 581; Tafel, **VI**, 591; Textor, **XV**, 444; Trapp, **VI**, 261; Vossius, **VI**, 582; Wolf, **VI**, 268; Woolsey, **VII**, 487.
- Latin Pronunciation, **XV**, 171.
- Lectures and University Teaching, Barnard, **V**, 775; Johnson, **XIII**, 363; Masson, **IV**, 271; Raumer, **VII**, 201, 213; Vaughn, **IV**, 271; Wolf, **VII**, 487.
- Liberal Education and Studies, Bates, **XV**, 155; Everett, **VIII**, 364; Felton, **X**, 281.
- Madras System, **X**, 467.
- Manners, Hopkins, **XI**, 930; Locke, **VI**, 213; **XIII**, 551; Montaigne, **IV**, 469; Thayer, **II**, 103; Plutarch, **XI**, 106.
- Mathematics, French Polytechnic system, **I**, 533.
- Memory, **II**, 385; **IV**, 171, 201, 721; **V**, 678; **VI**, 464, 602; **VII**, 279; **X**, 126; **XII**, 416; **XIV**, 87, 321, 469; **XVII**, 230.
- Mental Arithmetic, **II**, 301; **VIII**, 385, 459.
- Mental Science, by J. Haven, **III**, 125.
- Methods, Essays on, by Currie, **IX**, 239; Diesterweg, **IV**, 233, 505; Dunn, **X**, 391; Morrison, **IX**, 294; Raumer, **VIII**, 101; Richards, **X**, 505; Ross, **IX**, 367; Spencer, **XIII**, 372; Thayer, **III**, 313; **IV**, 219, 450.
- Military Exercises in School, by Molineux, **XI**, 513.
- Monitorial System, English National Schools, **X**, 503; Irish National Schools, **XIII**, 150.
- Moral Education, Brooks, **I**, 336; Cowdery, **XVI**, 323; Fellenberg, **III**, 595; Lalor, **XVI**, 48; Locke, **XI**, 473; **XIII**, 548; Russell, **IX**, 19; Spencer, **XI**, 496.
- Music, or Singing, **VIII**, 633; **IX**, 267; **XVI**, 38.
- Mutual Instruction, Bell, **X**, 491; De Gerando, **X**, 465; Fowle, **X**, 611; Keenah, **X**, 402; Lancaster, **X**, 402.
- Mother Tongue, **III**, 327; **IV**, 473; **V**, 235, 246, 253; **VI**, 197, 201; **VII**, 375; **XI**, 458; **XII**, 464; **XIV**, 343; **XVI**, 340.
- Motives to Study, Lyton, **III**, 295; Mann, **XIII**, 518; **XVI**, 279; Rousseau, **V**, 477; Spencer, **XIII**, 377; Thayer, **VI**, 435.
- Natural Science, **IV**, 445; **VIII**, 123; **X**, 145; **XV**, 85; **XVI**, 522.
- Number, Early Sessions In, **II**, 132; **V**, 186; **VII**, 696; **IX**, 247, 467; **XI**, 24.
- Natural History, Dawson, **III**, 428.
- Natural Consequences of Actions, the Law of Discipline, Spencer, **XI**, 496.
- New Gymnastics, **XI**, 531; **XII**, 605.
- Object Teaching, Bacon, **V**, 674, 680; Calkins, **XII**, 633; Comenius, **V**, 680; Halm, **V**, 696; Hecker, **V**, 603, 696; Henzky, **V**, 694; Hoole, **XII**, 647; Geuser, **V**, 748; Greene, **X**, 245; Locke, **VI**, 220; Marcel, **XI**, 21; Oswego System, **XII**, 604; **XIV**, 93; Pestalozzi, **V**, 76; Ratich, **V**, 680; Semler, **V**, 691; Sheldon, **XIV**, 93; Spencer, **XIII**, 378; Wilbur, **XV**, 189.
- Oral Teaching, Barnard, **V**, 777; Currie, **IV**, 104; Masson, **V**, 270; Marcel, **XI**, 31, 330; Morrison, **IX**, 303, 321; Wolf, **VI**, 272; Vaughn, **IV**, 271.
- Penmanship, Everett, **IV**, 432; **XII**, 556; Mulhausen, **X**, 524; Niebuhr, **XVI**, 207; Raumer, **X**, 626; Thayer, **IV**, 450.
- Perception and Perceptive Faculties, Bacon, **XII**, 42; Hill, **XIV**, 86; Marcel, **XI**, 21; Raumer, **VIII**, 207; Russell, **II**, 113, 316; Spencer, **XIII**, 396.

- Physical Education, Aphorisms, VIII 75; Aristotle, XIV. 140; Ascham, III. 41; Bandow, V. 510; Beecher, II. 399; Comenius, V. 281; Currie, XI. 233; Elyot, XVI. 490; Fellenberg, III. 596; Gutsmuths, VIII. 191; Jahn, VIII. 196; Lalor, XVI. 34; Locke, XI. 462; Lorinser, VIII. 187; Luther, IV. 448; VIII. 190; Lyeurgus, XIV. 620; Mann, Mason, XIV. 61; Milton, II. 83; Montaigne, IV. 465; Pestalozzi, VIII. 192; Plutarch, XI. 105; Quintilian, XI. 118; Rabalais, XIV. 149; Ragner, VIII. 185; Rousseau, V. 473; VIII. 185; Spencer, XI. 485; Trotzendorf, V. 112; Vehri, III. 390, 394; English Public Schools, XV. 105.**
- Pictures in School-books, IV. 509; V. 508, 512; VI. 585; XII. 647.**
- Picturing-out Method, IX. 413, 424.**
- Pleasure in Study and Work, VI. 464; XIII. 386, 468, 587.**
- Pleasure-grounds of Knowledge, XIII. 121; XVI. 438.**
- Play-state of Childhood, XIII. 93.**
- Physiology, V. 499, 512; XI. 49; XVI. 44.**
- Plays and Pastimes, V. 284; X. 239; XI. 490; XIII. 53, 539, 594; XIV. 474.**
- Poetry, Study of, II. 82; III. 329; VI. 220, 226, 467, 517; VIII. 226; X. 161; XI. 509; XIII. 117; XVI. 47.**
- Political Science, II. 82; III. 82; V. 513; IX. 105; XI. 214; XIV. 135, 326.**
- Posture in Devotion, IV. 29; VIII. 631.**
- Pouring-in Method, V. 819.**
- Powers to be Educated, Hill, XIV. 84.**
- Practicality, IV. 477; V. 480; X. 129, 414; XIII. 13, 103, 812.**
- Praise, VIII. 618; XVI. 62.**
- Prayers in Colleges, II. 662; IV. 23; V. 515.**
- Precocity, V. 473, 749; XI. 492, 508.**
- Prize Schemes, I. 629; II. 708; III. 249, 255; V. 226; VI. 287.**
- Printing-press, uses of to Boys, IX. 636.**
- Private Schools, II. 719; VI. 213; XIII. 553.**
- Progression, XVI. 643.**
- Progressives of the 18th Century, VI. 463.**
- Promotion by merit, XIII. 667; XV. 92.**
- Pronunciation of English, IV. 226; XIV. 354; of Greek and Latin, IV. 226; XV. 171.**
- Public Schools in England, VIII. 257; XV. 81; XVI. 501, 567.**
- Public Schools and Private Schools, XI. 114; XIII. 361; XV. 323.**
- Punctuality, II. 659; V. 520.**
- Pupil-Teachers, IV. 191; X. 385, 504.**
- Puzzling Pupils, XIV. 313.**
- Quadragesimum, XIV. 172.**
- Quadrivium, I. 254; VI. 21.**
- Quick-wits, XI. 58.**
- Questions for Examining a School, I. 686; X. 449.**
- Ratio Studiorum, of the Jesuits, XIV. 462.**
- Reaction, Law of, XI. 493, 502.**
- Real Schools, VI. 248; V. 661, 674, 691; VIII. 508; IX. 247; XIV. 425; XV. 440, 767.**
- Reading, Methods of Instruction, Currie, IX. 273, 277; Dunn, X. 399; Harwich, VIII. 436; Honcamp, IV. 234; Lloyd, IV. 225; Locke, VI. 219, XIV. 304; Morrison, IX. 307; Olivier, V. 508; Prinsen, VIII. 612; Quintilian, XI. 120; Raumer, X. 624; XII. 473; Thayer, IV. 218; Wilbur, XV. 201.**
- Reasoning with Children, V. 471; XIII. 562.**
- Reflection and Reflective Faculties, Marcel, XI. 33; Russell, IV. 196, 309.**
- Religion and Religious Instruction, Acquaviva, XIV. 471; Arnold, IV. 559; Bible, X. 167; Basedow, V. 501, 513; Brooks, I. 336; Burgess, II. 569; Currie, IX. 284; Cousin, XIII. 287; Comenius, V. 226; Cowdery, XVI. 323; Dunn, X. 427; Fellenberg, XIII. 325; Fisher, X. 180; Hegel, X. 171; Hoole, XVII. 238; Huntington, IV. 23; Krüsi, V. 195; Lalor, XVI. 49; Lindsley, VII. 35; Locke, XIV. 308; Luther, X. 183; Niemeyer, X. 132, 173, 177, 184; Plato, X. 170; Pestalozzi, X. 175, 182; Potter, IX. 154, 162; Pythagoras, X. 167; Randall, II. 156; Raumer, VII. 401; X. 241; Richards, X. 512; Socrates, X. 169; Thayer, III. 71; Zehokke, X. 169, 176.**
- Religion in Public Schools of Baden, X. 206; Bavaria, VI. 281; VIII. 501; England, IV. 559, 573; X. 513; XV. 109; XVI. 670; Greece, XII. 574; Holland, XIV. 642, 663; Hanover, XV. 426, 769; Ireland, XI. 137, 152; Jesuit Schools, XIV. 471; Prussia, VIII. 420; Scotland, IX. 292.**
- Requisitions and Prohibitions, XIII. 851.**
- Rewards in School, VI. 212, 435; XI. 480.**
- Rote-learning, V. 247, 474; VI. 465; VII. 405; XII. 416; XIII. 113, 373.**
- Rules for School Attendance, XIV. 816; Good Behavior, VIII. 613; X. 438; XIII. 171, 549, 851; Hopkins' Grammar School, IV. 710; Dorchester School, XVI. 106.**
- Science in Schools, I. 164, 514; II. 66, 81, 349, 447; III. 147, 965; IV. 757; V. 671, 779; VI. 233, 448; XIII. 399.**
- Science and Art, I. 102, 315, 386; II. 715; X. 218.**
- Simultaneous Method, IX. 299.**
- Socratic Method, IX. 375; Currie, IX. 283.**
- Spelling, Dunn, X. 409; Richards, X. 517; Thayer, III. 312.**
- Studies, True Order of, Hill, VI. 180, 449; VI. 273, 491; Spencer, XIII. 374.**
- Synthetical Method, IV. 504.**
- Synchronistical Method in History, IV. 515.**
- Text-books, Catalogue of American, XIII. 208, 401, 627; XIV. 601, 753.**
- Topical Method in Geography, VIII. 82.**
- Tripartite Organization, IX. 316; XIII. 149.**
- Turners and Turning System, VII. 92; VIII. 180.**
- Unconscious Tuition, I. 141.**
- Utility of Studies, II. 386; V. 479; XV. 101.**
- Virtue, V. 494; VIII. 10; X. 167; VIII. 550.**
- Will, V. 511, 671; IX. 37; V. 137; XIV. 472, 617.**
- Writing and Reading, IV. 234; VII. 694; XII. 477.**
- Writing and Drawing, VIII. 388.**

IV. TEACHERS; NORMAL AND MODEL SCHOOLS; TEACHERS' INSTITUTES.

- The School and the Teacher in English Literature, **III**, 155, 449; **IV**, 183; **VIII**, 283; **XVI**, 432.
- Legal Recognition of Teaching as a Profession; Memorial, **X**, 297-308.
- The Teacher as an Artist, by Z. Richards, **XIV**, 69.
- The Teacher's Motives, by Horace Mann, **XIV**, 277.
- Essentials to Success in Teaching, **I**, 561.
- Letters to a Young Teacher, by G. F. Thayer, **I**, 337; **II**, 103, 391, 657; **III**, 71, 313; **IV**, 219, 450; **VI**, 433; **VIII**, 81.
- Lectures to Young Teachers; Intellectual Education, by W. Russell, **II**, 113, 317; **III**, 47, 321; **IV**, 199, 309. Moral Education, **IX**, 19.
- Special Training a Pre-requisite to Teaching, by H. Mann, **XIII**, 507.
- Teachers and their Education, by W. E. Channing, **XII**, 453.
- Professional Training of Teachers, **XIII**, 299.
- Didactics as a Department in Colleges, by T. Hill, **XV**, 177.
- German Views upon Female Teachers, **IV**, 795.
- Teachers' Conferences and other Modes of Professional Improvement, **XIII**, 273.
- Teachers' Institutes in Wisconsin, **VIII**, 673. In Different States—Historical Development, **XV**, 387. Connecticut, 387; New York, 395; Ohio, 401; Rhode Island, 405; Massachusetts, 412.
- School for Teachers, by W. R. Johnson, **V**, 799.
- Teachers' Seminaries, by C. E. Stowe, **XV**, 688.
- Relation of Normal Schools to other Institutions, by W. F. Phelps, **III**, 417.
- Historical Development of Normal Schools in Europe and America, **XIII**, 753-770.
- Germany and other European States—Number, Location and Results of Normal Schools, **VIII**, 360; Professional Training of Teachers in Anhalt, **XV**, 345; Austria, **XVI**, 345; Baden, **X**, 212; Bavaria, **VI**, 289; Belgium, **VIII**, 593; Brunswick, **XV**, 453; France, **XIII**, 281; Greece, **XII**, 579; Hanover, **XV**, 419; Hesse-Cassel, **XV**, 439; Hesse Darmstadt, **XIV**, 416; Holland, **XIV**, 501, 647; Lippe Detmold, **XV**, 475; Mecklenburg, **XV**, 464, 472; Nassau, **II**, 444; Prussia, **XI**, 165; Russia, **XII**, 727; Sardinia, **III**, 517; Saxony, **V**, 353; Switzerland, **XIII**, 313.
- Great Britain. Training Colleges in England and Wales, **X**, 349. Normal Schools of the British and Foreign School Society, **X**, 435. Normal and Model Schools of the Home and Colonial Society, **IX**, 449. St. Mark's Training College for Masters of the National Society, **X**, 531. Battersea Training School for Parochial Schoolmasters, **IX**, 170. Chester Diocesan Training College, **X**, 553. Normal Schools for Training Schoolmistresses, **X**, 571; Normal Schools at Edinburgh and Glasgow, **X**, 583. Irish System of Training Teachers, **XI**, 136.
- France. Normal Schools and Training, **XIII**, 281. Normal Schools of the Christian Brothers, **III**, 437.
- Holland. Normal School at Haarlem, **XIV**, 501.
- Prussia. Provisions for Education and Support of Teachers, **XI**, 165-190. System of Normal Schools, **XIV**, 191-240. Seminary School at Weissenfels, **VIII**, 455; **XIV**, 219. Dr. Julius on, **XVI**, 89. Regulations of 1854, **XVI**, 395.
- Normal Schools in Switzerland, **XIII**, 312-440.
- Normal and Model Schools of Upper Canada, **XIV**, 483.
- United States—Documentary History of Normal Schools—Adams, **I**, 529; Bache, **VIII**, 360; Barnard, **X**, 24, 40; Bates, **XVI**, 453; Brooks, **I**, 587; Barrowes, **XVI**, 195; Calhoun, **XVI**, 80; Carter, **XVI**, 77; Channing, **XII**, 453; Clinton, **XIII**, 341; Dwight, **IV**, 16; Edwards, **XVI**, 271; Emerson, **XVI**, 93; Everett, **XIII**, 758; Gullaudet, **X**, 16; Hall, **V**, 386; **XVI**, 75; Humphrey, **XII**, 655; Julius, **XVI**, 89; Johnson, **V**, 798; Lindsay, **VII**, 35; Mann, **V**, 646; **VIII**, 360; Olmsted, **V**, 369; Peirce, **IV**, 305; Phelps, **III**, 417; Putnam, **I**, 568; Sears, **XVI**, 471; Stephens, **VIII**, 308; Stowe, **XV**, 688; Tillinghast, **I**, 67; Webster, **I**, 590; Wickersham, **XV**, 221.
- Chapter in the History of Normal Schools in New England; Charles Brooks, **I**, 587.
- California. State Normal School, **XVI**, 628.
- Connecticut. History of State Normal School, **X**, 15-58. History of Teachers' Institutes, **XV**, 387.
- Illinois. State Normal University at Bloomington, **IV**, 774.
- Kentucky. State Normal School, **III**, 217.
- Maine. State Normal School, **XVII**.
- Maryland. State Normal School, **XVII**.
- Massachusetts. State Normal School at Bridgewater, **V**, 646; **XVI**, 595. At Barre; Everett's Address, **XIII**, 758. At Westfield, **XII**, 652. Teachers' Seminary at Andover, **V**, 386. History of Teachers' Institutes, **XV**, 387.
- New Jersey. State Normal School, **III**, 221. Its Aims, by D. Cole, **V**, 835. Farnum Preparatory School, **III**, 397.
- New York. State Normal School at Albany, **XIII**, 341, 531. History of Teachers' Institutes, **XV**, 385. Training School at Oswego, **XVI**, 230. Normal School at Brockport, **XVII**.
- Ohio. History of Teachers' Institutes, **XV**, 401. Normal Schools in, **XVII**.
- Pennsylvania. Professional Training of Teachers, **XIV**, 721. Normal School at Millersville, **XV**, 221. Philadelphia Normal School for Female Teachers, **XIV**, 727. **XVI**, 195. Normal School at Mansfield, **XVII**.
- Rhode Island. Education of Teachers, **XI**, 282. History of Teachers' Institutes, **XV**, 405.
- Vermont. Teachers' Seminary in 1823, **XVI**, 146. State Normal Schools, **XVII**.
- Wisconsin. Teachers' Institutes, **VIII**, 673. Normal Schools, **XVII**.

V. STATE AND NATIONAL SYSTEMS.

- Educational Statistics, I.** 640-651.
- Anhalt.** System of Public Instruction, **XV.** 344.
- Austria.** System of Public Instruction, **IX.** 589. Educational Statistics, **III.** 275; **IV.** 257; **XVI.** 5, 337, 609; **XVII.** 127.
- Baden.** System of Public Instruction; Primary, **X.** 201. Secondary, **XI.** 233. Seminary for Orphans at Beuggen, **III.** 383.
- Bavaria.** System of Public Instruction, **VI.** 273, 571; **VIII.** 491. Educational Statistics, **I.** 625.
- Belgium.** System of Public Instruction, **VIII.** 581.
- Brunswick.** System of Public Instruction, **XV.** 447.
- Canada.** History and System of Public Instruction in Upper Canada, by J. G. Hodgins, **I.** 186. Statistics of Education in Upper Canada, **XIII.** 640. Educational Institutions in U. and L. Canada, **II.** 728.
- Denmark.** System of Public Instruction, **XIV.** 625.
- England.** Historical Sketch of Elementary Instruction, **X.** 323. British and Foreign School Society and Borough Road Schools, **X.** 371-450. National Society for Promoting the Education of the Poor, **X.** 480-574. Home and Colonial Infant and Juvenile Society, **IX.** 449. Lord John Russell's Scheme of National Education, **I.** 638. Ashburton Prizes for Teaching Common Things, **I.** 629; **X.** 93. Miss Coutts' Prizes, **II.** 708. Public Endowed or Foundation Schools, **IV.** 807; **VIII.** 257; **XV.** 81-117. Appropriations to Education, Science, and Art, **I.** 385; **II.** 348; **X.** 347.
- France.** System of Public Instruction, **VI.** 293; **IX.** 481-412. Guizot's Ministry of Public Instruction, **XI.** 254, 357. Statistics of Education, **IV.** 257. Expenditures for Public Instruction, **II.** 337, 717.
- Free Cities; Frankfurt, Hamburg, Bremen, and Lübeck.** System of Public Instruction, **XV.** 333.
- Germany.** History and Course of Primary Instruction, **VIII.** 348-402. Real Schools, **V.** 689-714. Educational Intelligence, **III.** 273; **IV.** 245.
- Greece.** System of Public Instruction, **XII.** 571-592. Statistics of Education, **I.** 628.
- Hanover.** System of Public Instruction, **IV.** 250; **XV.** 415, 732.
- Hesse Cassel.** System of Public Instruction, **XV.** 431.
- Hesse Darmstadt.** Public Instruction, **XIV.** 409-430.
- Holland.** System of Public Instruction, **IV.** 801; **VIII.** 595; **XIV.** 495, 641-720. Proposed Revision of System, **II.** 719. Statistics of Public Schools, **I.** 401. Scheme of Christian Education adopted at Dort, 1618, **V.** 77.
- Honduras.** Condition of Education, **II.** 236.
- India.** Progress of Education, **II.** 787.
- Ireland.** Elementary Education, **XI.** 133-154. System of National Education, **III.** 272; **IV.** 363. National Schools, **XIII.** 145. Educational Appropriations, **I.** 390; **II.** 348, 716. Endowed Grammar and English Schools, **XV.** 721.
- Italy.** Institutions for Public Instruction, **II.** 721. History of Education, **VII.** 413.
- Lippe-Detmold and Schaumburg Lippe.** System of Public Instruction, **XV.** 473, 576.
- Luxemburg and Limberg.** System of Public Instruction, **XIV.** 664.
- Mecklenburg.** System of Public Instruction, **XV.** 459. Ignorance in, **III.** 278.
- Nassau.** System of Public Instruction, **II.** 444.
- New South Wales.** Statistics of Education, **I.** 639.
- Norway.** System of Public Instruction, **VIII.** 295.
- Portugal.** System of Public Instruction, **XVII.**
- Prussia.** History and Statistics of Public Instruction, **IV.** 245; **VIII.** 403-434; **IX.** 569. Expenditures for Public Instruction in Prussia and France, **II.** 337. Public Schools of Berlin, **VIII.** 440. Frederic William Gymnasium and Real Schools of Berlin, **V.** 699. Burgher School at Halle, **VIII.** 434. Higher Burgher School of Potsdam, **VIII.** 457.
- Russia.** National Education, **XII.** 725.
- Sardinia.** System of Public Instruction, **III.** 513; **IV.** 37, 479.
- Saxony.** System of Public Instruction, **V.** 350. Secondary Instruction, **IV.** 251. Burgher School, **IX.** 201. Early School Code, **VI.** 432.
- Scotland.** Elementary Education, **IX.** 215. Parochial School System, **II.** 716; **VII.** 319.
- Spain.** Public Instruction, **XVII.**
- Sweden.** Public Instruction, **II.** 730; **XVI.** 639.
- Turkey.** System of Education, **II.** 725.
- Wurtemberg.** Early School Code, **VI.** 426. System of Public Instruction, **XVII.**
- UNITED STATES.** Official Exposition of Common Schools, **II.** 257, 465-561. School Funds and Public Instruction in the several States, **I.** 371, 447. Statistics of Population, Area, and Education in 1850, **I.** 364. Statistics of Public Instruction in Cities and large Towns, **I.** 458. Educational Movements in the several States, **I.** 234, 641; **II.** 257, 452, 734; **IV.** 824. Plan of Central Agency for Advancement of Education, by H. Barnard, **I.** 134. National Bureau of Education, **XV.** 180. Lord Elgin on the American School System, **III.** 239. Education among the Cherokees, by W. P. Ross, **I.** 120. Schools as they were Sixty Years ago, **XIII.** 123, 737; **XVI.** National Department of Education, **XVII.** 49. Constitutional Provision, **XVII.** 81. Educational Land Policy, **XVII.** 65.
- Alabama.** School Statistics, **I.** 368, 371; **II.** 464. Constitutional Provision, **XVII.**
- Arkansas.** Statistics, **I.** 368, 371.
- California.** **XVI.** 625. Statistics, **I.** 372; **II.** 467.
- Connecticut.** History of Common Schools, by H. Barnard, **IV.** 657; **V.** 114; **XIII.** 725; **XIV.** 244; **XV.** 275; **XVI.** 333. History of the School Fund, **VI.** 367-415. Henry Barnard's Labors, **I.** 669. Public Schools and other Educational Institutions, **XI.** 305. Free Academy and School Movements in Norwich, **II.** 665; **III.** 191. Statistics, **I.** 373; **II.** 469. Constitutional Provision, **XVII.**

- Delaware. Statistics, **I**, 368, 373; **II**, 474.
 Florida. Statistics, **I**, 367, 374.
 Georgia. **I**, 368, 374; **II**, 477.
 Illinois. **I**, 368, 375; **II**, 479.
 Indiana. **I**, 368, 375; **II**, 480.
 Iowa. **I**, 364, 374; **II**.
 Kansas. **XVII**.
 Kentucky. **I**, 368, 377; **II**, 488.
 Louisiana. **I**, 368, 377; **II**, 473.
 Maine. **I**, 368, 378; **II**, 495.
 Maryland. **I**, 368, 378.
 Massachusetts. Doctrine of Free Schools, **XV**, 15.
 Analysis of Horace Mann's Reports, **V**, 623. School Superintendence; Memorial of American Institute of Instruction, **V**, 653. Legal Recognition of Teaching as a Profession; Memorial of Worcester County Teachers' Association, **X**, 297. **I**, 368, 379; **II**, 499.
 Michigan. **I**, 368, 447; **II**, 510.
 Minnesota. **I**, 368.
 Mississippi. **I**, 368, 447.
 Missouri. **I**, 368, 448.
 Nebraska. **XVII**.
 Nevada. **XVII**.
 New Hampshire. **I**, 368, 448; **II**, 510.
 New Jersey. **I**, 368, 449; **II**, 517.
 New York. **I**, 368, 449; **II**, 518.
 North Carolina. **I**, 368, 451; **II**, 527. Schools as they were in 1794, **XVI**, 1.
 Ohio. System of Common Schools, by W. T. Coggeshall, **VI**, 81, 532; **I**, 368, 451; **II**, 531.
 Oregon. **I**, 368; **XVII**.
 Pennsylvania. History of Common Schools, **VI**, 107, 555; **I**, 368, 452; **II**, 541.
 Rhode Island. **I**, 368, 454; **II**, 544. Labors of Henry Barnard, **I**, 723.
 South Carolina. **I**, 368, 455; **II**, 553. Marion on Free Schools for, **XVI**, 119.
 Tennessee. **I**, 368, 455.
 Texas. **I**, 368, 445.
 Vermont. **I**, 368, 466.
 Virginia. **I**, 368, 457; Gov. Wise on Education, **II**, 557.
 West Virginia. **XVII**.
 Wisconsin. **I**, 368, 457.
 District of Columbia. **XVII**.
 Cities. Statistics of Population, **I**, 479. Gradation of Schools for, **XV**, 316, 309. Reports on, **I**, 458.
 Boston: Edward Everett and the Boston Schools, **I**, 642. Latin Grammar School of Boston, **XII**, 529. Girls in the Public Schools of Boston, **XIII**, 243. Dedication of the Everett School House, **IX**, 633. Report of N. Bishop, **I**, 458. School Houses in, **XVI**, 701.
 Chicago High School, by W. H. Wells, **III**, 531. Retirement of Mr. Wells, **XIV**, 811.
 Cincinnati: Woodward High School, **IV**, 520.
 New York City. Public School Society, **XV**, 489.
 Philadelphia High School, by J. S. Hart, **I**, 93. Report on Public Schools, **I**, 465.
 Providence: Report on, **I**, 408.
 St. Louis System of Public Instruction, **I**, 348.

VI. SECONDARY, INTERMEDIATE AND ACADEMICAL SCHOOLS.

- Anhalt. Gymnasiums and Higher Schools, **XV**, 346.
 Austria. System and Statistics of Secondary Instruction, **IX**, 598. **XVI**, 465. **XVII**, 137.
 Baden. System of Sec. Instruction, **XI**, 233-253.
 Bavaria. Secondary Schools, **VIII**, 491-521.
 Belgium. Secondary Schools, **VIII**, 587.
 Brunswick. Classical Schools, **XV**, 456.
 Canada. Secondary Schools, **XIII**, 649.
 Denmark. Outline of System and Statistics, **XIV**, 625.
 England. Public or Foundation Schools, **VIII**, 257; **XV**, 81. Mr. Sewall's School at Radleigh, **IV**, 803. St. Mary's College at Winchester, **XVI**, 501. St. Paul's School in London, **XVI**, 667. Eton College, **XVII**.
 France. Lyceums and Secondary Schools, **VI**, 294. Statistics of Secondary Education in 1843, **IX**, 400. Secondary Instruction under Guizot's Ministry, **XI**, 357. Schools of Preparation for the Polytechnic School, **XII**, 47.
 Free Cities. Gymnasiums and Secondary Institutions, **XV**, 339.
 Greece. Secondary Schools, Gymnasiums, &c., **XII**, 581.
 Hanover. Real Schools and Girls' High School, **IV**, 250. Secondary Instruction, **XV**, 753-781.
 Hesse-Cassel. Secondary Institutions, **XV**, 435.
 Hesse-Darmstadt. Classical, Real, Trades, and Higher Female School Systems, **XIV**, 419.
 Holland. Secondary Schools, **XIV**, 654.
 Ireland. Endowed Grammar and English Schools, **XV**, 721.
 Mecklenburg. Secondary Schools, **XV**, 465.
 Nassau. Secondary Education, **II**, 445.
 Norway. Burgher, Real, and Learned Schools, **VIII**, 301.
 Prussia. Statistics of Secondary Instruction, **II**, 341; **IV**, 247. Higher Institutions of Berlin, **V**, 699. Secondary Education, **IX**, 569.
 Sardinia. Secondary Instruction, **III**, 518; **IV**, 37.
 Saxony. Real and Classical Schools, **V**, 354; **IV**, 251. Secondary Education, **IX**, 201.
 United States. Historical Development of Incorporated Academies, **XVI**, 403. Statistics of Academies, &c. in 1850, **I**, 368; Lawrence Academy, Groton, Mass., **I**, 49. Williston Seminary, Easthampton, Mass., **II**, 173. Norwich Free Academy, Norwich, Conn., **II**, 695; **III**, 190. Public High School in Chicago, **III**, 531. Woodward High School in Cincinnati, **IV**, 520. Phillips Academy, Andover, Mass., **VI**, 73. Phillips Academy, Exeter, N. H., **VI**, 76. Boston Latin School, **XII**, 529. Public Grammar Schools of Philadelphia, **XIII**, 818.

VII. UNIVERSITY AND COLLEGE EDUCATION.

- Signification of the term University, **IX**, 49-56.
 University Honors, **VIII**, 313.
 University Studies and Teaching, Raumer, **VII**, 901.
 Classical Education. Erasmus' Views, **IV**, 729. David Cole upon, **I**, 67. Discussion before the American Association, **I**, 86. S. P. Bates, **XV**, 155. Speaking and Writing Latin, Raumer, **VII**, 471.
 College Education and Self-Education, **IV**, 202.
 Prayers in Colleges, by F. D. Huntington, **IV**, 23.
 College Code of Honor, by Horace Mann, **III**, 65.
 Authorities upon the History of Universities, and Academical Degrees, **II**, 747; **VII**, 49; **IX**, 56.
 Canada. University and Colleges of Upper and Lower Canada, **II**, 728; **VII**, 188; **XIII**, 649.
 England. Government Grants in 1856, **II**, 348. Oxford Commemoration, **II**, 234. Expenses in Eton College in 1560, **IV**, 230. University for Legal Education, **I**, 386. Working Men's College, **I**, 389.
 France. University and Colleges, **VI**, 296.
 Germany. German Universities in the Sixteenth Century, from Raumer, **V**, 535. History of German Universities, from Raumer, **VI**, 3-65; **VII**, 47-152. Student Societies in German Universities, **VII**, 160. Essays on the Improvement of German Universities, from Raumer, **VII**, 200-251. Statistics, **I**, 401.
 Greece. The Otto University, **XII**, 501.
 Holland. Condition of the Universities, **I**, 397.
 Ireland. Queen's Colleges and University, **IX**, 579.
 Prussia. Receipts and Expend. of Universities, **II**, 338.
 Russia. Universities, **I**, 381.
 Sardinia. University Education, **IV**, 43.
 Saxony. University of Leipzig, **V**, 362.
 Scotland. University of Edinburgh, **IV**, 821.
 Wurtemberg. University of Tübingen, **IX**, 57.
 United States. Characteristics of American Colleges, by C. C. Felton, **IX**, 122.
 Improvements Practicable in American Colleges, by F. A. P. Barnard, **I**, 175, 269.
 Consolidation and other Modifications of American Colleges, by Alonzo Potter, **I**, 471.
 An American University, by B. A. Gould, **II**, 265-293. By A. D. Bache, **I**, 477. By an Alabamian, **III**, 213. Discussion, **I**, 86.
 Society for the Promotion of Collegiate and Theological Education at the West, **I**, 235; **XV**, 261.
 Statistics of New England Colleges in 1855-6, **I**, 405.
 Harvard University. History, **IX**, 129. Grants and Donations to, **IX**, 139-165. Progress under Pres. Felton, **X**, 293. Museum of Zoölogy, **IX**, 613.
 Yale College. History, **V**, 541-566. Elihu Yale, **V**, 715. List of Deceased Benefactors, **X**, 603. Department of Philosophy and the Arts, **I**, 459. Influence of, by F. A. P. Barnard, **V**, 723; by W. B. Sprague, **X**, 681.
 Illinois College. History, **I**, 225.
 Transylvania University, Kentucky, **III**, 217.
 Cumberland University, Tennessee; History, **IV**, 765.
 University Convocation of New York, **XV**, 502.
 St. John's College, Maryland, Charter, **XVI**, 549. Report on Reorganization, **XVI**, 539.

VIII. SCHOOLS OF SCIENCE AND ARTS; MUSEUMS, &C.

- Democratic Tendencies of Science, D. Olmsted, **I**, 164.
 Progress of Science in the United States, **I**, 641.
 Science and Scientific Schools, by J. D. Dana, **II**, 349.
 Schools of Science and Art, **X**, 216.
 Physical Sciences. By H. J. Anderson, **I**, 515-532.
 Scientific Schools in Europe, by D. C. Gilman, **I**, 315.
 Department of Science and Art, Eng., **II**, 233, 715.
 Higher Special Schools of Science and Literature in France, by D. C. Gilman, **II**, 93.
 Special Instruction in Science and Art in France, **IX**, 405.
 Polytechnic Schools. At Paris, **VIII**, 661; **XII**, 51-130. Le Verrier's Report upon Mathematical Study preparatory to the Polytechnic School of Paris, **I**, 533-550; **II**, 177-192. Conditions for Admission, **XIII**, 678. Polytechnic Institute at Vienna, **VIII**, 670. Polytechnic School at Carlsruhe, **XI**, 209. Polytechnic School at Zürich, **XI**, 218. Polytechnic Schools of Bavaria, **VIII**, 510.
 Russia. Schools of Special Instruction, **I**, 389.
 Lawrence Scientific School at Cambridge, **I**, 216.
 Scientific Department in Yale College, **I**, 359.
 Cooper Scientific Union, New York, **I**, 652; **IV**, 526.
 Industrial School at Chemnitz, **III**, 239; **IV**, 798.
 School of Mines at Freyburg, Saxony, **IX**, 167.
 Drawing; Report of a French Commission, **II**, 419.
 Art Education, by Miss M. A. Dwight, **II**, 409-587; **III**, 467; **IV**, 191; **V**, 305.
 On a College of Architecture, by D. B. Reid, **II**, 629.
 Dudley Observatory, **II**, 593. Uses of Astronomy, by E. Everett, **II**, 605-628.
 United States Coast Survey, **I**, 103.
 Geological Hall and Agricultural Rooms of New York, **IV**, 785.
 British Museum, **VIII**, 314. British Museum of Practical Geology, **VI**, 239. Museum of Comparative Zoölogy at Harvard, **IX**, 613. Educational Uses of Museums, by Prof. E. Forbes, **IV**, 785.
 Institute of Agriculture and Forestry at Hohenheim, **VIII**, 564. At Tharand, Saxony, **IV**, 797.
 Agricultural Education in France, **VIII**, 545-563. In Ireland, **VIII**, 567-580.
 Plan of Agricultural School, by J. A. Porter, **I**, 329.
 Hartlib's Plan of a College of Husbandry, **XI**, 191.
 Mechanics' Institutes in England, **I**, 388; **II**, 712.
 Plan of a Trade School, by Sir W. Peity, 1647, **XI**, 199.
 Industrial Training of Poor, **X**, 81. Industrial Schools in England, **I**, 653. Ireland, **I**, 545. Belgium, **I**, 384; **VIII**, 588. Bavaria, **VIII**, 510. Nassau, **II**, 446. Saxony, **IV**, 222, 798. Wurtemberg, **IV**, 729.

IX. MILITARY AND NAVAL EDUCATION.

- Physical and Military Exercises in Public Schools a National Necessity, by E. L. Molineux, **XI**, 513.
- Military Schools and Education in England, **IV**, 608; **XIV**, 523. France, **I**, 626; **XII**, 7-274. Holland, **XIV**, 241. Prussia, **XII**, 275-399; **VIII**, 437. Russia, **I**, 383; **XIV**, 503. Switzerland, **XIII**, 689-710. Sardinia, **XIII**, 455. Austria, **XIII**, 409-446, 711. Persia, **II**, 727.
- United States; Military Academy at West Point, **XIII**, 17-48. Regulations for Admission, **XIII**, 659. Report of Visitors, 1863, **XIII**, 661; **XV**, 51. On the Conditions for Admission, by H. Barnard, **XIV**, 103-127. Military Academy at Norwich, Vt., **XIII**, 65. Eagleswood Military Academy, at Perth Amboy, N. J., **XIII**, 471.
- Naval and Navigation Schools in England, **XIV**, 627; **XV**, 63.
- French Naval School at Brest, **XII**, 263.
- United States Naval Academy; Report of Visitors, 1864, **XV**, 17-50.

X. PREVENTIVE AND REFORMATORY EDUCATION.

- Education a Preventive of Misery and Crime, by E. C. Tainsch, **XI**, 77.
- Crimes of Children and their Prevention, **I**, 345.
- Publications on Reformatory Education, **III**, 812.
- Family Training and Agricultural Labor in Reformatory Education, **I**, 609-624.
- Crime, Pauperism, and Education in G. Brit., **VI**, 311.
- Preventive and Reformatory Education, **III**, 561-812.
- Reform Schools in England, **III**, 753. In Ireland, **III**, 807. In Scotland, **III**, 801. In France, **III**, 653. In Holland, **III**, 619. In Italy, **III**, 580. In Switzerland, **III**, 591.
- Reformatory Establishment of Dusselthal Abbey, Prussia, **II**, 231.
- Prison for Juvenile Criminals, Isle of Wight, **III**, 19.
- Wichern and the Raube Haus, **III**, 5, 10, 603; **IV**, 824.
- Agricultural Reform Schools in Belgium and France, **III**, 621-736.
- Agricultural Colonies of France, particularly Mettray, **I**, 609; **III**, 653.
- Reformatory Education in the United States, **IV**, 824; Statistics of State and City Reform Schools in the United States, **III**, 811; **VIII**, 339.
- State Industrial School for Girls, at Lancaster, Mass., **IV**, 359; **XVI**, 652.
- Mode of Improving Factory Population, **VIII**, 305.
- Special Training of Women for Social Employments, **III**, 485.
- International Philanthropic Congress at Brussels, **II**, 236; **III**, 231.
- Industrial Training of the Poor, **I**, 384, 635; **II**, 446; **III**, 585; **IV**, 252, 798; **X**, 81.

XI. EDUCATION FOR DEAF-MUTES, BLIND AND IDIOTS.

- Statistics of the Deaf, Dumb, Blind, Insane, and Idiotic in the U. S. in 1850, **I**, 650.
- Statistics of the Deaf and Dumb Institutions in the United States, **I**, 444.
- American Asylum for the Deaf and Dumb, **I**, 440.
- N. Y. Institution for the Deaf and Dumb, **III**, 347.
- Institutions and Instruction for the Blind, by L. P. Brockett, **IV**, 127.
- Valentine Hallé and the Instruction of the Blind, **III**, 177; **IV**, 130.
- Account of Laura Bridgman, by S. G. Howe, **IV**, 383.
- Idiots and Institutions for their Training, by L. P. Brockett, **I**, 593.
- Origin of Treatment and Training of Idiots, by E. Seguin, **II**, 145.
- New York Asylum for Imbeciles at Syracuse, **IV**, 416.
- Butler Hospital for the Insane, at Providence, R. I., **III**, 309.
- Insanity as the Result of Misdirected Education, by E. Jarvis, **IV**, 591.

XII. MORAL AND RELIGIOUS EDUCATION; DENOMINATIONAL SCHOOLS.

- Thoughts on Religion and Public Schools, by George Burgess, **II**, 562.
- Christianity in Education, from Raumer, **VIII**, 216.
- Religious Instruction, from Raumer, **VII**, 401.
- Religious and Moral Instruction in Public Schools; Discussion by the American Association, **II**, 153.
- Importance and Methods of Moral Training, by G. F. Thayer, **III**, 71.
- Best Methods of Moral Teaching, by C. Brooks, **I**, 336.
- Moral and Mental Discipline, by Z. Richards, **I**, 107.
- Formation of Moral Character, the Main Object of Schools, by M. F. Cowdery, **XVI**, 353.
- Moral Education, by W. Russell, **IX**, 19-48; Fellenberg, **III**, 595; Kriisi, **V**, 193; Lalor, **XVI**, 48; Locke, **XI**, 473; **XIII**, 548; Spencer, **XI**, 496.
- Aphorisms on Religious and Moral Training, **X**, 166; **XII**, 407.
- Prayers in Colleges, by F. D. Huntington, **IV**, 23.
- Catholic Educational Establishments in the United States, **II**, 435.
- The Hieronymians; from Raumer, **IV**, 622.
- Jesuits and their Schools, **XIV**, 455-482. From Raumer, **V**, 213; **VI**, 615.
- The Christian Brothers, (Freres Chrétiens,) **III**, 437.

XIII. EDUCATION AND SCHOOLS FOR FEMALES.

- Aphorisms upon Female Education, **XIII**, 232.
 Views of German Authorities, **XIII**, 485.
 St. Jerome—Letter to Letia on the Education of her Daughter, **V**, 593.
 E. Everett, Female Education, **IX**, 635; **XII**, 721.
 Education of Girls, from Baumer, **X**, 227, 613.
 Mental Education of Women, by C. McKeen, **I**, 567.
 Training of Women for Social Employments, **III**, 485.
 Sisters of Charity—Mrs. Jameson, **III**, 495.
 Female Adult Education in Ireland, **I**, 634.
 School for Girls in Paris, **I**, 394.
 Girls in the Public Schools of Boston, **XIII**, 243.
 Female Colleges in the State of Ohio, **XIII**, 267.
 New York Grammar School for Girls, **I**, 408.
 Packer Collegiate Institute for Girls, **I**, 579.
 Young Ladies' High School, Providence, R. I., **V**, 14.
 Troy Female Seminary, **VI**, 145.
 Mt. Holyoke Female Seminary, **X**, 670.
 Bailey's Young Ladies' High School, Boston, **XII**, 435.
 Ohio Female College, College Hill, **XIII**, 503.
 Girls' High School, Charleston, S. C., **XIII**, 620.
 Vassar College, **XI**, 55. **XVII**.

XIV. PHYSICAL EDUCATION.

- Aphorisms and Suggestions upon Physical Training, **VIII**, 75.
 Physical Education; by Baumer, **VIII**, 185. By Locke, **XI**, 462. By Lalor, **XVI**, 34. By Spencer, **XI**, 485.
 Health of Teachers, by Miss C. E. Beecher, **II**, 399.
 Physical Exercises, by S. W. Mason, **XIV**, 61.
 New Gymnastics, by Dio Lewis, **XI**, 531; **XII**, 665.
 Physical and Military Exercises in Schools a National Necessity, by E. L. Molineux, **XI**, 513.
 Plays, Pastimes, and Holidays of Children, by Horace Bushnell, **XIII**, 93.
 Progressive Development of Physical Culture in the United States, **XV**, 231.
 Military Gymnastic School at Vincennes, France, **XII**, 265.

XV. SUPPLEMENTARY, SELF AND HOME EDUCATION.

- Hints on Reading; Selections from Authors, by T. H. Vail, **II**, 215.
 Advice to Students and Young Men on Education, Studies, and Conduct, **XV**, 377; **XVI**, 187, 216, 223.
 Pestalozzi—Address on Christmas Eve, **VII**, 701. On New Year's, **VII**, 712. Paternal Instructions, **VII**, 722.
 Home Education; Labors of Rev. W. Burton, **II**, 333.
 College and Self-education, by D. Masson, **IV**, 262.
 Lowell Lectures, **V**, 439.
 Mechanics' Institutes, **VIII**, 250.
 Origin of Lyceums, **VIII**, 249. The American Lyceum, **XIV**, 535-538.
 Lyceums, Mechanics' Institutes and Libraries in England, **I**, 388; **II**, 712; **III**, 241-272.
 Statistics of Libraries in Europe, **I**, 370; **II**, 214. In the United States in 1850, **I**, 369.
 Libraries for Teachers in France, **XIII**, 293. Economic Library, England, **III**, 271.
 Astor Library, **I**, 648. Boston Public Library, **II**, 203; **VII**, 252. Baltimore Public Library, **III**, 226.
 Worcester Free Public Library, **XIII**, 606.
 Providence Athenaeum, **III**, 308. Lawrence Library for Factory Operatives, **I**, 649.
 Management of Libraries—Edward's Library Manual, **II**, 210.
 Books of Reference, **VIII**, 315.

XVI. EDUCATIONAL ASSOCIATIONS.

- Association for Educational Purposes, by H. Barnard, **XIV**, 366; **XV**, 819.
 American Association for the Advancement of Education, **I**, 3-136, 234; **XV**, 267.
 American Association for the Advancement of Science, **III**, 147.
 American Association for the Supply of Teachers, **XV**, 237.
 American Common School Society, **XV**, 247.
 American Education Society, **XIV**, 367.
 American Institute of Instruction, **II**, 19, 234. Index to Lecturers and Subjects, **II**, 241. Memorial on State School Superintendence, **V**, 653. Biographical Sketches of Presidents, **XV**, 211.
 American Lyceum, **XIV**, 535.
 American School Society, **XV**, 118.
 American Social Science Association, **XVI**, 391.
 American Sunday School Union, **XV**, 705.
 American Women's Educational Assn., **XV**, 273.
 Baltimore County and City Association, **XVI**, 377.
 Board of National Popular Education, **XV**, 271.
 Boston Associated Instructors of Youth, **XV**, 527.
 British and Foreign School Society, **X**, 371-450.
 College Delegates (New England) Association, **XVII**.
 Guild of Schoolmasters, **XV**, 337.
 Home and Colonial Infant and Juvenile Society, **IX**, 449-486.
 Literary and Scientific Convention; New York, 1836, **XV**, 221.
 National Associations, **XV**, 237, 623.
 National Association (England) for Promotion of Social Science, **IV**, 818.
 National Convention and Association of Superintendents of Schools, **XVI**, 389.

- National Organization of Teachers, by W. Russell, **XIV**, 7.
- National Teachers' Association; Proceedings, **XIV**, 5-92, 593. Its Nature and Objects, by J. D. Philbrick, **XIV**, 49.
- National Society (England) for Promoting the Education of the Poor, **X**, 490-474.
- National Society of Science, Literature, and Arts, **XV**, 61.
- New York (City) Society of Teachers, **XIV**, 807; **XV**, 491. Teachers' Associations, **XV**, 495.
- New York University Convocation, **XV**, 502.
- North-Western Educational Society, **XV**, 275.
- Public School Society of New York, **XV**, 489.
- Society for the Diffusion of Useful Knowledge, **XV**, 239.
- Society for Promoting Manual Labor in Literary Institutions, **XV**, 231.
- Society for the Promotion of Collegiate and Theological Education at the West, **I**, 235; **XV**, 961.
- State Convention of County Superintendents; New York, **XV**, 505.
- TEACHERS' ASSOCIATIONS in France, **XIII**, 293.
- General Assembly of German Teachers, **IV**, 258.
- United Association of Schoolmasters, Eng., **III**, 262.
- Teachers' Conferences and other Modes of Professional Improvement, **XIII**, 273.
- Western Literary Institute and College of Professional Teachers, **XIV**, 739.
- Middlesex County (Conn.) School Association, **XIV**, 397; **XV**.
- State Teachers' Associations, Educational Societies and Conventions—Alabama, **XVI**, 375. Arkansas, **XVI**, 381. California, **XVI**, 785. Connecticut, **XV**, 393. Delaware, **XVI**, 369. Florida, **XVI**, 381. Georgia, **XVI**, 358. Illinois, **XVI**, 149. Indiana, **XVI**, 765. Iowa, **XVI**, 745. Kansas, **XVI**, 385. Kentucky, **XVI**, 352. Louisiana, **XVI**, 383. Maine, **XVI**, 777. Maryland, **XVI**, 377. Massachusetts, **XV**, 507. Michigan, **XV**, 633. Minnesota, **XVII**. Mississippi, **XVI**, 381. Missouri, **XVI**, 365. New Hampshire, **XVI**, 751. New Jersey, **XVI**, 729. New York, **XVI**, 349. 477. North Carolina, **XVI**, 361. Ohio, **VI**, 532. Oregon, **XVI**, 383. Pennsylvania, **XV**, 647. Rhode Island, **XIV**, 539. South Carolina, **XVI**, 364. Tennessee, **XVI**, 357. Texas, **XVI**, 373. Vermont, **XV**, 617. Virginia, **XVI**, 172. Wisconsin, **XIV**, 583; **XVII**. District of Columbia, **XVI**, 390. West Virginia, **XVI**, 383.

XVII. PHILOLOGY AND BIBLIOGRAPHY.

- Philological Contributions, by J. W. Gibbs, **II**, 198; **III**, 101-124.
- English Language in Society and the School, by M. H. Buckham, **XIV**, 343.
- Study of the Anglo-Saxon, or the Relation of the English to other Languages, by J. S. Hart, **I**, 33.
- Dictionary of the English Language; Requirements in a Lexicographer, by Isaiah Dole, **III**, 161.
- Modern Greek Language, by S. G. Howe, **II**, 193.
- Latin Language, from Raumer, **VII**, 471.
- Early Illustrated School Books, **XIII**, 205. Primers and Hornbooks, **VIII**, 310. A B C Books and Primers, **XII**, 593.
- Books of Reference, **VIII**, 315.
- American Text Books—Catalogue of Authors and Books, **XIII**, 209, 401, 626; **XIV**, 601, 751; **XV**, 539.
- Educational Literature—Book Notices, **I**, 415; **II**, 256, 737, 739; **IV**, 261, 272, 831; **V**, 318; **IX**, 351; **XI**, 319; **XIII**, 223, 632; **XIV**, 400.
- Statistics of Newspapers and Periodicals in the United States in 1850, **I**, 651.
- Educational Periodicals of America, **I**, 413, 636. Complete List, **XV**, 383.
- English Educational Journals, **I**, 414. French, **I**, 413. German, **I**, 413. Italian, **IV**, 802.

XVIII. SCHOOL ARCHITECTURE.

- Defects in School Constructions, **IX**, 487.
- Principles and Practical Illustrations of School Architecture, by Henry Barnard, **IX**, 467; **X**, 695; **XI**, 563; **XII**, 701; **XIII**, 817; **XIV**, 778; **XV**, 782; **XVI**, 701.
- District Schools, or for Children of every age. Plan by H. Mann, **IX**, 540; by G. B. Emerson, 542, 548; by H. Barnard, 550, 553, 555; by R. S. Burt, 556; by T. A. Telf, 559; by A. D. Lord, 562; by D. Leach, 563.
- Primary and Infant Schools. General Principles, **X**, 695. Playground and Appliances, **X**, 697. School-room, by Wilderspein, **X**, 699; by Chambers, 702; by British and Foreign School Society, 705; by National Society, 706; by Committee of Council on Education, 710; by Dr. Dick, 714; by J. Kendall, 715; by J. W. Ingraham, for Boston Primary Schools, 718; by J. D. Philbrick, 740; by New York Public School Society, 750; in Providence, **XI**, 583.
- Baltimore Female High School, **V**, 198; Cincinnati Hughes High School, **XIII**, 623; Boston Latin School, **XII**, 551; Woodward High School, **IV**, 522; Chicago High School, **III**, 537; High School, Hartford, **XI**, 606; Public High School, Middletown, **XI**, 612; New York Free Academy, **XIV**, 788; Providence Public High School, **XI**, 597; Norwich Free Academy, **II**, 696; St. Louis High School, **I**, 348.
- Seminaries for Girls. Packer Collegiate Institute, Brooklyn, **I**, 581; Richmond Female College, **I**, 231; Public Grammar School for Girls in New York, **I**, 408; Providence Young Ladies' High School, **V**, 14; Vassar College, **XVII**.

- Union and Graded Schools—Plans, Elevations, &c., **X**, 563-612; **XII**, 701. Union School, Ann Arbor, Mich., **VIII**, 91. Public Floating School, Baltimore, **V**, 201. Haven School Building, Chicago, **XIII**, 610. Newberry Public School, Chicago, **VI**, 515. Putnam Free School, Newburyport, Mass., **XIII**, 616. Public Schools No. 20 and No. 33, New York City, **VI**, 524. School Houses in Philadelphia, **XIII**, 617. Graded School, Simcoe, U. C., **VIII**, 679. Union Public School, Ypsilanti, Mich., **IV**, 780. Norwich Central School, **II**, 609.
- Grammar Schools—Plans. Lincoln Grammar School, Boston, **VI**, 518. Dwight Grammar School, Boston, **IV**, 769. Fifteenth Ward (N. Y.) Public Grammar School for Girls, **I**, 408. Central High School, Philadelphia, **I**, 92; **XIII**, 831. Grammar, Providence, **XI**, 588, 594. Prescott Grammar, **XVI**, 711.
- Normal Schools—Plans, Elevations, &c. Illinois State Normal School, **IV**, 774. New Jersey State Normal School, **III**, 220. Massachusetts State Normal School at Westfield, **XII**, 653. New York State Normal School, **XIII**, 539. Philadelphia City Normal Schools, **XIV**, 737. Girls' High Normal School, Charleston, S. C., **XIII**, 690. Normal and Model Schools at Toronto, U. C., **XIV**, 488. Oswego Training School, **XVI**, 213. New Britain, **X**, 51. Bridgewater Normal School, **XVI**, 466. Framingham, **XVI**, 469. Salem, **XVI**, 470.
- Public Library, Boston, **VII**, 252. Cooper Scientific Union, N. Y., **I**, 652. Dudley Observatory, Albany, **I**, 504. Yale College in 1764, **V**, 722. American Asylum for the Deaf and Dumb, Hartford, Ct., **I**, 440. New York Institution for the Deaf and Dumb, **III**, 346. New York Asylum for Imbeciles, Syracuse, **IV**, 416. N. Y. State Geological Hall, **IV**, 781. Harvard Hall, **V**, 530. Yale College, 1764; **V**, 722.
- Apparatus for Physical Exercise, **IX**, 530; **XI**, 539; **XII**, 677; for illustration, **XIV**, 569.
- Blackboard and wall-surface, **IX**, 546, 563; **X**, 739; **XVI**, 575.
- Crayons, how made, **XVI**, 574.
- Dedicatory Exercises and Addresses, **III**, 193; **IX**, 633; **XIII**, 836; **V**, 648; **XII**, 655; **XIII**, 532; **XVI**, 453; **I**, 645, 647.
- Drawing-room and Desks, **X**, 554; **XIV**, 795; **XVI**, 722.
- Furniture for Schools, **IX**, 551; **X**, 754; **XII**, 687; Defective Construction, **IX**, 492, 518; **XI**, 537; Chase's Adjustable Desk, **XIII**, 656; Mott's Revolving Seat, **X**, 563.
- Library of Reference, **I**, 739; **IX**, 545.
- Location and Playground, **IX**, 492, 503, 507, 510, 527, 542; **X**, 731.
- Privies and Facilities for Cleanliness, **IX**, 520, 539; **X**, 728; **XI**, 807; **XIII**, 853.
- Warming, **IX**, 546, 552; **X**, 705, 727; **XI**, 584, 598; **XII**, 832; **XVI**, 579, 713.
- Ventilation in American Dwellings, **V**, 35. In School Houses, **IX**, 563, 547, 568; **X**, 724; **XIII**, 612, 832, 858; **XIV**, 801; **XV**, 782; **XVI**, 716, 727.
- Ornamentation, **X**, 731; Mrs. Sigourney on, 732; Salem High School, **XIV**, 804; **IX**, 543.
- Specifications, Terms of, **X**, 733; **XII**, 708.
- Seats and Desks, Arrangement of, **IX**, 551; **XI**, 583; **XIII**, 656; Octagonal Plan, **XVI**, 722; Barnard's plan, with division, **X**, 760, 761.
- Size of building, **XVI**, 716.
- Stand, movable, for blackboard, **XVI**, 709.
- Furnaces, **XVI**, 579, 582; Hot-water apparatus, **XVI**, 713.
- Rules for Care of School-house, **XIII**, 851, 857; for use of Furnaces, **XV**, 803; setting furnace, **XVI**, 584.

XIX. EDUCATIONAL ENDOWMENTS AND BENEFACTORS.

- Land Grants of the Federal Government for Educational Purposes, to 1854, **I**, 202; **XVII**, 65.
- List of Benefactions to Harvard University, **IX**, 139.
- List of Deceased Benefactors of Yale College, **X**, 693.
- Boston Educational Charities, **VIII**, 528; **IX**, 606.
- Individual Benefactors. Samuel Appleton, **XII**, 403. J. J. and W. B. Astor, **I**, 638. Joshua Bates, **VII**, 270. John Bromfield, **V**, 521. Nicholas Brown, **III**, 229. Peter Cooper, **IV**, 526. Thomas Dowse, **III**, 284; **IX**, 355. Mrs. Blandina Dudley, **II**, 563. Edmund Dwight, **IV**, 5. Peter Faneuil, **IX**, 603. Paul Farnum, **III**, 397. John Green, **XIII**, 606. John Harvard, **V**, 523. Edward Hopkins, **IV**, 668. John Hughes, **IV**, 520. William Lawrence, **II**, 33. John Lowell, **V**, 427. Theodore Lyman, **X**, 5. James McGill, **VII**, 188. S. J. North, **VI**, 104. George Peabody, **I**, 237; **II**, 642; **III**, 226. T. H. Perkins, **I**, 551. Miss Caroline Plummer, **XIII**, 73. John and Samuel Phillips, **VI**, 66. Henry Todd, **IV**, 711. Stephen Van Rensselaer, **VI**, 223. Matthew Vassar, **XI**, 53. James Wadsworth, **V**, 389. David Watkinson, **IV**, 837. Samuel Williston, **II**, 173. William Woodward, **IV**, 520. Elihu Yale, **V**, 715.

XX. MISCELLANEOUS.

- The Gyroscope, or Mechanical Paradox, **II**, 238. Explanation of the Gyroscope, by E. S. Snell, **II**, 701. Treatise upon the Gyroscope, by Maj. J. G. Barnard, **III**, 537; **IV**, 529; **V**, 298.
- Lowe's Printing Press, **IX**, 636.
- Stereoscope. Educational Uses of, **IX**, 632.
- Museum of Zoölogy, **IX**, 61.
- Indexes. Vol. I, ix.-xix.; **II**, 749; **III**, 819; **IV**, 839; **V**, 851; **VI**, 317, 623; **VII**, 723; **VIII**, 681; **IX**, 637; **X**, 763; **XI**, 613; **XII**, 731; **XIII**, 865; **XIV**, 817; **XV**, 829; **XVI**, 791.
- General Index to Vols. I. to V., **V**, 857.
- Classified Index to Vols. I. to XVI., **XVII**, 17-40.

XXI. EDUCATIONAL BIOGRAPHY AND LIST OF PORTRAITS.

BIOGRAPHICAL SKETCHES.

- Abbot, Benjamin, **VI**, 80.
 Abbott, Gorham D., **XVI**, 600.
 Agricola, Rudolph, **IV**, 717.
 Adelung, J. C., **XI**, 451.
 Alcott, W. A., **IV**, 629.
 Alcott, A. B., **XVI**, 130.
 Allen, C. H., **XIV**, 396.
 Allen, F. A., **XV**, 681.
 Allen, W., **X**, 365.
 Alexander, de Villa Dèi, **IV**, 726.
 Andrews, I. W., **XVI**, 605.
 Acquaviva, Claudius, **XIV**, 462.
 Andrews, L., **XVI**, 604.
 Appleton, Samuel, **XII**, 403.
 Aristotle, **XIV**, 131.
 Arey, Oliver, **XV**, 484.
 Arnold, Thomas K., **IV**, 545.
 Astley, J., **IV**, 165.
 Ascham, Roger, **III**, 23.
 Aventinus, **XI**, 163.
 Bailey, Ebenezer, **XII**, 429.
 Baker, W. M., **XVI**, 166.
 Baker, W. S., **X**, 592.
 Baldwin, Theron, **XV**, 261.
 Barnard, F. A. P., **V**, 753.
 Barnard, Henry, **I**, 659.
 Barnard, John, **I**, 307.
 Barnes, D. H., **XIV**, 513.
 Basol, Marquise de, **III**, 510.
 Basedow, T. B., **V**, 487.
 Basedow, Emile, **V**, 491.
 Bateman, Newton, **XVI**, 165.
 Bates, J., **VII**, 270.
 Bates, S. P., **XV**, 682.
 Beck, T. Romeyn, **I**, 654.
 Beecher, Miss C. E., **XV**, 250.
 Benton, A. B., **XVI**, 775.
 Bell, Andrew, **X**, 467.
 Bild, **V**, 66.
 Bingham, Caleb, **V**, 395.
 Bishop, Nathan, **XVI**,
 Blewett, B. T., **XVI**, 431.
 Bodiker, J., **XI**, 437.
 Boccaccio, **VII**, 423.
 Boyd, E. J., **XV**, 645.
 Braidwood, J., **III**, 348.
 Bridgman, Laura, **IV**, 363.
 Brainerd, J., **XVI**, 331.
 Borgi, Jean, **I**, 583.
 Bromfield, John, **V**, 521.
 Brooks, Charles, **I**, 581.
 Brougham, Lord, **VI**, 467.
 Brown, J. Horace, **XV**, 764.
 Brown, Nicholas, **III**, 291.
 Buckingham, J. T., **XIII**, 129.
 Buckley, J. W., **XIV**, 28.
 Burrows, T. H., **VI**, 107, 555.
 Burt, Andrew, **XV**, 679.
 Burton, Warren, **II**, 333.
 Busch, **V**, 727.
 Butler, Caleb, **II**, 54.
 Butler, J. D., **XVII**,
 Butler, Cyrus, **III**, 310.
 Buss, Johannes, **V**, 293.
 Caldwell, C., **XVI**, 109.
 Calhoun, W. B., **XV**, 212.
 Cæsarius, J., **IV**, 25.
 Carlton, Oliver, **XV**, 523.
 Carter, James, **V**, 337.
 Carter, J. G., **V**, 407.
 Cecil, Sir W., **IV**, 161.
 Cheever, Ezekiel, **I**, 297; **XV**, 530.
 Cheke, Sir John, **IV**, 163.
 Chrysoloras, Emanuel, **VII**, 440.
 Clajus, Johannes, **XI**, 412.
 Claxton, Timothy, **VIII**, 253.
 Clerc, Laurent, **III**, 349.
 Coburn, C. R., **XV**, 679.
 Coelenius, C., **IV**, 25.
 Coffin, J. H., **XVI**, 784.
 Colburn, Dana P., **XI**, 289.
 Colburn, Warren, **II**, 294.
 Colet, John, **VIII**, 291; **XVI**, 405.
 Comenius, **V**, 25.
 Cosmo de Medici, **VII**, 445.
 Conover, A. M., **XIV**, 393.
 Cowley, A., **XII**, 151.
 Courteilles, M. de, **III**, 704.
 Corston, William, **X**, 363.
 Corte, P. A., **IV**, 491.
 Cowdrey, M. F., **XVI**, 589.
 Craig, A. J., **XIV**, 394.
 Crato, **V**,
 Cross, M. K., **XVI**, 751.
 Cruikshank, J., **XV**, 485.
 Crozet, Claude, **XIII**, 31.
 Curtis, Joseph, **I**, 655.
 Curtis, T. W. T., **XV**, 607.
 Dante, **VII**, 418.
 Davies, Charles, **XV**, 479.
 Davis, Wm. Vnn L., **XV**, 675.
 Day, J., **XVI**, 126.
 Denman, **XV**, 395.
 Denzel, B. G., **VII**, 315.
 Delille, J., **III**, 158.
 Dewey, Chester, **XV**, 477.
 Dewitt, G. A., **V**, 17.
 Diesterweg, **VII**, 312.
 Dick, James, **I**, 392.
 Dinter, **VII**, 153.
 Donatus, **XVII**,
 Dowse, Thomas, **III**, 284; **IX**, 355.
 Dringenberg, Louis, **V**, 65.
 Dudley, Mrs. E., **II**, 508.
 Dunnell, M. H., **XVI**, 783.
 Duncan, Alexander, **III**, 311.
 Dwight, Edmund, **IV**, 5.
 Dwight, F., **V**, 803.
 Dwight, Theodore, **XIV**, 558.
 Dwight, Timothy, **V**, 567.
 Eaton, Theophilus, **I**, 298; **V**, 30.
 Ebrardt, U., **XI**, 160.
 Edison, H. K., **XVI**, 750.
 Edwards, B. B., **XIV**, 381.
 Edwards, Richard, **XVI**, 169.
 Elyott, Sir Thomas, **XVI**, 463.
 Emerson, G. B., **V**, 417.
 Erasmus, **IV**, 729.
 Ernesti, I. A., **V**, 750.
 Everett, Edward, **VII**, 325.
 Fanzul, P., **XI**, 603.
 Farnum, Paul, **III**, 397.
 Farnham, G. L., **XV**, 483.
 Faville, O., **XVI**, 750.
 Fellenberg, E., **III**, 591.
 Felton, C. C., **X**, 265.
 Fenelon, **XIII**, 477.
 Fisk, Wilbur, **VI**, 297.
 Fliedner, T., **I**; **III**, 487.
 Ford, Jonathan, **XIV**, 395.
 Froebel, F., **IV**, 792.
 Fowle, S., 597.
 Franklin, B., **I**, 45; **VIII**, 251.
 Fuller, Thomas, **III**, 155.
 Fox, X., 363.
 Fry, Elizabeth, **III**, 508.
 Frank, Fabian, **XI**, 163.
 Franke, V., 441.
 Frisch, J. L., **XI**, 439.
 Gall, James, **IV**,
 Gallaudet, T. H., **I**, 417.
 Gottsched, J. C., **XI**, 448.
 Galloway, S., **XVI**, 601.
 Geineitz, Christian, **XI**, 426.
 George of Trebizond, **VII**, 440.
 Gesner, J. M., **V**, 741.
 Gerard, **IV**, 622.
 Goodnow, L. T., **XVI**, 386.
 Goodrich, S. G., **XIII**, 134.
 Green, John, **XIII**, 608.
 Grant, Miss, X., 656.
 Guber, John, **XI**, 42.
 Greene, S. S., **XIV**, 600.
 Grimm, J., **XI**, 454.
 Gregory, J. M., **XV**,
 Goswin, **IV**, 715.
 Grisonom, John, **VIII**, 325.
 Guarino, **VII**, 436.
 Guilford, Nathan, **VIII**, 289.
 Guizot, **XI**, 254.
 Hager, D. B., **XV**, 217.

- Hadden, IV, 164.
 Hall, S. R., V, 373.
 Hall, W., XV, 127.
 Halm, V, 625.
 Hamann, J. G., VI, 947.
 Hancock, J., XVI, 602.
 Harnisch, Wilhelm, VII, 317.
 Hart, J. S., V, 91.
 Harvard, John, V, 523.
 Harvey, T. H., XVI, 608.
 Hauberle, V, 509.
 Häu, V., III, 477.
 Hawley, G., XI, 94.
 Hazeltine, L., XV, 481.
 Hecker, V, 695.
 Hedges, Nathan, XVI, 737.
 Hegius, Alexander, IV, 723.
 Henkle, XVI.
 Herder, VI, 195.
 Higginson, John, XIII, 794.
 Hillhouse, James, VI, 325.
 Holbrook, J., VIII, 229; XIV, 558.
 Hopkins, Mark, XI, 219.
 Hovey, C. E., VIII, 95.
 Howe, S. G., XI, 389.
 Hoole, C., XII, 647.
 Hopkins, E., IV, 668.
 Hoss, G. W., XVI, 775.
 Hubbard, F., XV.
 Hubbard, R., V, 316.
 Huntington, XV, 606.
 Hurty, J., XVI, 776.
 Ickelsamer, XI, 403.
 Ives, M. B., V, 311.
 John of Ravenna, VII, 435.
 Johnson, Samuel, VII, 461.
 Johnson, Walter R., V, 781.
 Jones, R. D., XV, 481.
 Kelly, Robert, I, 655; X, 313.
 Kempis, Thomas à, IV, 626.
 Kingsbury, John, V, 9.
 Kneeland, John, XV, 526.
 Kraczenberger, V, 79.
 Krüsi, Hermann, V, 161.
 Kyrie, John, the "Man of Ross," II, 654.
 Ladd, J. J., XIV, 592.
 Lancaster, Joseph, X, 355.
 Lange, Rudolph, IV, 736.
 Lawrence, Abbot, I, 205.
 Leo X., VII, 454.
 Lewis, Samuel, V, 727.
 Lindsley, Philip, VII, 9.
 Locke, John, VI, 209.
 Long, W., XVI, 497.
 Lord, A. D., XVI, 607.
 Lowell, John, V, 427.
 Loyola, Ignatius, XIV, 455.
 Lycurgus, XIV, 611.
 Lyman Theodore, X, 5.
 Lyon, Mary, X, 649.
 Lawrence, Amos, XVII.
 Lawrence, William, II, 33.
 May, Samuel J., XVI, 141.
 McDonough, John, II, 736.
 McGill, James, VII, 188.
 McJilton, J. N., XVII.
 McKee, Joseph, I, 655.
 McMynn, XIV, 391.
 Mann, Horace, V, 611.
 Marks, D., V, 64.
 Marvin, J. G., XVI, 626.
 Mason, Lowell, IV, 141.
 Mayhew, Ira, XV, 641.
 Medici, Lorenzo di, VII, 445.
 Melancthon, Philip, IV, 741.
 Micellus, IV, 464.
 Mildmay, Sir W., IV, 164.
 Mirandola, Pius di, VII, 449.
 Milton, John, XIV, 159.
 Morhof, XI, 436.
 Morse, Augustus, XV, 608.
 Mowry, William A., XIV, 592.
 Nagali, VII, 300.
 Neander, V, 599.
 Niederer, VII, 289.
 North, Edward, XV, 486.
 North, S. J., VI, 104.
 Northead, C., XV, 220.
 Oberlin, XVII.
 Oelinger, XI, 406.
 Olivier, V, 508.
 Olmsted, Denison, V, 367.
 Orbilius, III, 157.
 Orcutt, XV, 630.
 Overberg, XIII, 365.
 Page, D. P., V, 811.
 Parish, A., XV, 523.
 Partridge, A., XIII, 49, 683.
 Peabody, George, I, 328; XVII.
 Peabody, S. H., XIV, 395.
 Pease, Calvin, XV, 631.
 Peckham, J., XVI, 743.
 Peers, B. O., XVI, 147.
 Peet, H. P., III, 365.
 Peirce, C., IV, 275.
 Pelton, J. C., XVI, 626.
 Perkins, T. H., I, 551.
 Pestalozzi, III, 401.
 Phelps, W. F., V, 827.
 Petrarch, VII, 424.
 Philbrick, J. D., XIV, 32.
 Philadelphus, VII, 441.
 Phillips, John, VI, 75.
 Phillips, S., VI, 66.
 Pickard, J. L., XIV, 392.
 Picket, Aaron, XIV, 393.
 Picket, Albert, XVII.
 Picius, J., VII, 449.
 Pierce, J. D., XV, 640.
 Plamann, VII, 309.
 Platter, Thomas, V, 79.
 Plummer, Caroline, XIII, 73.
 Poggius, VII, 442.
 Politian, VII, 445.
 Pomeroy, E. C., XV, 486.
 Potter, Alonzo, XVI, 599.
 Powell, W. H., XVI, 167.
 Pradt, J. B., XIV, 394.
 Putnam, D., XV, 646.
 Radwin, Florentius, IV, 622.
 Ramsauer, J., VII, 301.
 Randall, S. S., XIII, 227.
 Ratich, V, 229.
 Ray, J., XVI, 603.
 Raumer, IV, 149.
 Redfield, W. C., IV, 833.
 Reuchlin, V, 67.
 Rice, V. M., XV, 391.
 Richards, Z., XIV, 23.
 Richard, C. S., XVI, 764.
 Richardson, M., XV, 605.
 Rickoff, A. J., XIV, 24.
 Ripley, E. L., XV, 645.
 Robbins, T., III, 279.
 Rousseau, V, 459.
 Russell, W., III, 139.
 Rytwise, J., XVI, 682.
 Sams, XVI, 602.
 Sanborn, E. D., XVI, 762.
 Sandinus, VII.
 Sapidus, V, 66.
 Sarmiento, XVI, 593.
 Sargano, VII, 435.
 Sawyer, H. E., XVI, 763.
 Scheurl, C., XI, 161.
 Schmidt, VII, 297.
 Seymour, D., X, 321.
 Sheldon, E. A., XV, 484.
 Sheldon, W. E., XV, 625.
 Sberwin, T., VIII, 461.
 Shottelius, XI, 429.
 Sill, D. M. B., XV, 645.
 Slade, W., XV, 250.
 Simler, V, 66.
 Smith, Sir Thomas, IV, 165.
 Spicer, A. C., XIV, 392.
 Standish, J. V. N., XVI, 185.
 Stearns, XV, 524.
 Sticler, XI, 435.
 Stoddard, J. V., XV, 480.
 Stone, A. P., XV, 219.
 Stowe, C. E., V, 586.
 Strong, E. F., XV, 607.
 Sturm, IV, 167.
 Swett, J., XVI, 790.
 Tappan, H. P., XIII, 451.
 Taylor, J. O., XV, 248.
 Thayer, G. F., IV, 613.
 Tenney, J., XVI, 761.
 Thayer, Sylvanus, XVII.
 Thomasius, J., V, 742.
 Thompson, J. B., XV, 487.

Thompson, Z., I, 654.
 Tillinghast, N., I, 655.
 Tobler, J. G., V, 205.
 Todd, Henry, IV, 711.
 Trotsendorf, V, 107.
 Valentine, T. W., XV, 493.
 Valla, VII, 443.
 Van Rensselaer, VI, 223.
 Vassar, M., XI, 53.
 Vehrli, III, 339.
 Vetrrier, XVI, 665.
 Vitellius, XVI, 606.
 Vittorino, VII, 436.
 Von Turk, V, 156.

Wadsworth, J., V, 389.
 Warton, J., XVI, 511.
 Wayland, F., XIII, 771.
 Watkinson, D., IV, 837.
 Welch, A. S., XV, 642.
 Weld, T., XV, 234.
 Wells, F. D., XVI.
 Wells, W. H., VIII, 529.
 Werner, G., IV, 799.
 Wessel, IV, 714.
 Weston, E. P., XVI, 784.
 White, E. E., XVI, 606.
 Wickersham, J. P., XVI, 289.
 Wichern, III, 5.

Willard, Mrs. Emma, VI, 125.
 Wimpbeling, V, 65.
 Wines, E. C., IX, 9.
 Wolf, F. A., VI, 260.
 Woodbridge, W. C., V, 51.
 Woodbridge, W., XVI, 136.
 Woodman, J. S., XVI, 761.
 Woolworth, S. B., XV, 498.
 Wotton, Sir Henry, XV, 123.
 Wright, L., II, 176.
 Wykeham, William of, XVI, 497.
 Yale, Elihu, V, 715.
 Zeller, VII, 305.
 Zerbolt, Gerard, IV, 625.

PORTRAITS.

Abbott, Gorham D., XVI, 600.
 Alost, W. A., IV, 620.
 Allen, F. A., XV, 629.
 Andrews, I. W., XVI, 605.
 Appleton, Samuel, XII, 1.
 Arnold, Thomas, IV, 545.
 Bailey, Ebenezer, XIV, 401.
 Baker, W. S., XI, 401.
 Baldwin, Theron, XV, 280.
 Barnard, F. A. P., V, 753.
 Barnard, Henry, I, 1.
 Bateman, N., XVI, 106.
 Bates, S. P., XV, 1.
 Bishop, N., XVII.
 Blewett, B. G., XVI, 432.
 Brooks, Charles, I, 587.
 Brown, Nicholas, III, 291.
 Bulkley, J. W., XIV, 28.
 Burrows, T. H., VI, 107.
 Camp, D. N., XV, 605.
 Carter, J. G., V, 407.
 Coburn, C. R., XV, 679.
 Colburn, D. P., XI, 280.
 Colburn, Warren, II, 294.
 Davies, Charles, XV, 479.
 Dowse, Thomas, IX, 355.
 Dwight, Edmund, IV, 1.
 Dwight, Francis, V, 803.
 Edwards, Richard, XVI, 167.
 Emerson, G. B., V, 417.
 Everett, E., VII, 325.
 Farnum, Paul, III, 397.
 Faville, O., XVI, 759.
 Felton, C. C., X, 265.
 Fisk, Wilbur, VI, 297.
 Fowle, W. B., X, 597.
 Gallaudet, T. H., I, 417.
 Galloway, S., XVI, 601.
 Garfield, James A., XVII, 1.
 Goodnow, I. T., XVI, 387.
 Green, John, XIII, 606.
 Greene, S. S., XIV, 609.
 Gregory, J. M., XV, 643.

Griscom, John, VIII, 325.
 Hagar, D. B., XV, 517.
 Hall, S. E., XV, 5.
 Hart, J. S., V, 91.
 Hatly, V., III, 477.
 Hazeltine, L., XV, 481.
 Henkle, William D., XVI, 432.
 Hillhouse, James, VI, 325.
 Holbrook, Josiah, VIII, 1.
 Hopkins, Mark, XI, 219.
 Hovey, C. E., XIII, 94.
 Howe, S. G., XI, 321.
 Johnson, W. R., V, 781.
 Kelley, Robert, X, 313.
 Kingsbury, John, V, 9.
 Lawrence, Abbott, I, 137.
 Lawrence, William, II, 1.
 Lewis, Samuel, V, 727.
 Lindsley, Philip, VII, 9.
 Lord, A. D., XVI, 607.
 Lyman, Theodore, X, 1.
 Lyon, Mary, X, 609.
 McCarty, H. D., XVI, 388.
 McGill, James, VII, 188.
 McJilton, J. N., XVII.
 McMynn, J. G., XIV, 391.
 Mann, Horace, V, 611.
 Mason, Lowell, IV, 141.
 Mayhew, Ira, XV, 641.
 North, E., XVII.
 North, S. J., VI, 104.
 Northend, Charles, XVI, 510.
 Olmsted, Denison, V, 367.
 Orcutt, Hiram, XV, 630.
 Page, D. P., V, 811.
 Pariah, A., XV, 523.
 Partridge, Alden, XIII, 657.
 Peabody, George, II, 642.
 Peckham, Isaiah, XVI, 743.
 Peet, H. P., III, 366.
 Peirce, Cyrus, IV, 275.
 Perkins, T. H., I, 551.
 Pestalozzi, IV, 65.

Phelps, Mrs. A. Lincoln, XVII.
 Phelps, W. F., V, 827.
 Philbrick, J. D., XIV, 39.
 Phillips, Samuel, VI, 66.
 Pickard, J. L., XIV, 129.
 Potter, Alonzo, XVI, 1.
 Randall, S. S., XIII, 227.
 Ray, I., XVI, 603.
 Richards, Z., XIV, 23.
 Rickoff, A. J., XIV, 24.
 Russell, William, III, 139.
 Ryerson, E., XVII.
 Sarmiento, D. F., XVI, 593.
 Sawyer, H. E., XVI, 763.
 Scammon, Jos. T., XVII.
 Sears, B., XVII.
 Sheldon, E. A., XV, 484.
 Sheldon, W. E., XV, 525.
 Sherwin, Thomas, VIII, 461.
 Silliman, Benjamin, XVII.
 Standish, J. V. N., XVI, 165.
 Stoddard, J. F., XV, 675.
 Stone, A. P., XV, 519.
 Stowe, C. E., V, 586.
 Swett, John, XVI, 790.
 Tappan, H. P., XIII, 449.
 Thayer, Sylvanus, XVII.
 Thayer, G. F., IV, 613.
 Tillinghast, N., II, 568.
 Van Rensselaer, Stephen, VI, 223.
 Vassar, Matthew, XI, 1.
 Wadsworth, James, V, 389.
 Watkinson, David, XVII.
 Wayland, Francis, XIII, 1.
 Wells, D. F., XVI, 749.
 Wells, W. H., VIII, 529.
 Weston, E. P., XVI, 783.
 Whitford, W. C., XVII.
 Wichern, J. H., III, 1.
 Wickersham, J. P., XV, 677.
 Willard, Mrs. Emma, VI, 1.
 Wines, E. C., IX, 9.
 Woolworth, S. B., XV, 385.

II. EDUCATION:—A NATIONAL INTEREST.

HISTORICAL DEVELOPMENT.

IN the ordinance of the Congress of the Confederation in 1785, respecting "the disposing of lands in the Western territory," "section sixteen of every township" was reserved for the maintenance of public schools.

The ordinance of 1787, "for the government of the Territory northwest of the river Ohio," confirmed the ordinance of 1785, and declared "that religion, morality and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall be forever encouraged."

The Constitution of the United States, after setting forth in the Preamble in words of sublime import the national objects for which the people of the United States had ordained this fundamental law, expressly grants to Congress the power "to dispose" of the public lands and other property—"to exercise exclusive jurisdiction" over the district to be ceded as the seat of government—and "to lay and collect taxes, &c., to provide for the common defense and general welfare."

In the Convention of 1787, which framed the Constitution, Mr. Charles Pinckney, of South Carolina, on the 29th of May and the 18th of August, and subsequently Mr. Madison, of Virginia, submitted propositions "to provide for the establishment of a National University at the seat of government," "for the advancement of useful knowledge," "and the promotion of agriculture, commerce, trades and manufactures." On the 14th of September, both of these delegates moved to insert in the list of powers vested in Congress, "to establish a university in which no preference or distinction should be allowed on account of religion." This motion was opposed by Gouverneur Morris, of New York, and was lost, as reported by Mr. Madison, expressly on the ground that the power to establish such a university was included in the grant of exclusive legislation over the district in which the government should be located. And as we learn from other sources, and from

the subsequent recommendations by President Washington, the power to encourage agriculture, trade, manufactures, and education, was understood by him, and other statesmen, to be included in the first clause of the enumerated powers of Congress "to lay taxes and to provide for the common defense and general welfare of the United States."

•
GEORGE WASHINGTON.

Fresh from the discussions of the Convention which framed the Constitution, of which he was the presiding officer, and called by the unanimous voice of his countrymen to inaugurate, as its chief executive, the national government, George Washington, in his first formal recommendation of special measures to both Houses of Congress, on the 8th of January, 1790, after commending further legislation for an efficient and uniform plan of military organization, as well as of a national judiciary, calls attention to the necessity of "uniformity in the currency, weights and measures;" "the advancement of agriculture, commerce, and manufactures," "the effectual encouragement, as well as to the introduction of new and useful inventions from abroad, as to the exertions of skill and genius in producing them at home;" "facilitating the intercourse between the distant parts of our country by a due attention to the post-office, and post-roads"—did not hesitate to add:—

Nor am I less persuaded, that you will agree with me in opinion, that there is nothing which can better deserve your patronage than the promotion of science and literature. Knowledge is in every country the surest basis of public happiness. In one, in which the measures of government receive their impression so immediately from the sense of the community, as in ours, it is proportionably essential. To the security of a free constitution it contributes in various ways; by convincing those who are intrusted with the public administration, that every valuable end of government is best answered by the enlightened confidence of the people; and by teaching the people themselves to know and to value their own rights; to discern and provide against invasions of them; to distinguish between oppression and the necessary exercise of lawful authority, between burdens proceeding from a disregard to their convenience and those resulting from the inevitable exigencies of society; to discriminate the spirit of liberty from that of licentiousness, cherishing the first, avoiding the last, and uniting a speedy but temperate vigilance against encroachments, with an inviolable respect for the laws.

Whether this desirable object will be the best promoted by affording aid to seminaries of learning already established, by the institution of a national university, or by any other expedients, will be well worthy of a place in the deliberations of the legislature.

In his speech to both Houses of Congress, December 7th, 1796, after referring to the measures adopted for the encouragement of manufactures, and urging immediate attention to agriculture as a matter of individual and national welfare—and especially of constituting a board (or as has since been done, by a National Depart-

ment) "charged with collecting and diffusing information, and enabled by premiums and small pecuniary aids to encourage, and assist a spirit of discovery and improvement. This species of establishment contributes doubly to the increase of improvement, by stimulating to enterprise and experiment, and by drawing to a common center the results everywhere of individual skill and observation, and spreading them thence over the whole nation"—he again returns to the expediency of establishing a national university, and also a military academy; and proceeds:—

The assembly to which I address myself, is too enlightened not to be fully sensible how much a flourishing state of the arts and sciences contributes to national prosperity and reputation. True it is, that our country contains many seminaries of learning highly respectable and useful; but the funds upon which they rest are too narrow to command the ablest professors, in the different departments of liberal knowledge for the institution contemplated, though they would be excellent auxiliaries.

Amongst the motives to such an institution, the assimilation of the principles, opinions and manners of our countrymen, by the common education of a portion of our youth from every quarter, well deserves attention. The more homogeneous our citizens can be made in these particulars, the greater will be our prospect of permanent union; and a primary object of such a national institution should be, the education of our youth in the science of government. In a republic, what species of knowledge can be equally important, and what duty more pressing in its legislation, than to patronize a plan of communicating it to those who are to be the future guardians of the liberties of the country.

In a letter addressed to Alexander Hamilton, from Philadelphia, September 1st, 1796, referring to the topics which he wished to introduce in his Farewell Address, a draft of which he had enclosed in a former letter, Washington regrets "that another subject (which in my estimation is of interesting concern to the well-being of this country) was not touched upon also;"—

I mean education generally, as one of the surest means of enlightening and giving just ways of thinking to our citizens, but particularly the establishment of a university; where the youth from all parts of the United States might receive the polish of erudition in the arts, sciences, and belles-lettres; and where those who were disposed to run a political course might not only be instructed in the theory and principles, but (this seminary being at the seat of the general government, where the legislature would be in session half the year, and the interests and politics of the nation of course would be discussed,) they would lay the surest foundation for the practical part also.

But that which would render it of the highest importance, in my opinion, is, that at the juvenile period of life, when friendships are formed, and habits established, that will stick by one, the youth, or young men from different parts of the United States would be assembled together, and would by degrees discover that there was not that cause for those jealousies and prejudices which one part of the Union had imbibed against another part:—of course sentiments of more liberality in the general policy of the country would result from it. What but mixing of people from different parts of the United States during the war rubbed off those impressions? A century, in the ordinary intercourse, would not have accomplished what the seven years' association in arms did; but that ceasing, prejudices are beginning to revive again, and never will be eradicated so effectually by any other means as the intimate intercourse of characters in early life,—who in all probability will be at the head of the councils of this country in a more advanced stage of it.

To show that this is no new idea of mine, I may appeal to my early communications to Congress; and to prove how seriously I have reflected on it since, and how well disposed I have been, and still am, to contribute my aid toward carrying the measure into effect, I enclose you the extract of a letter from me to the Governor of Virginia, and a copy of the resolves of the legislature of that State in consequence thereof.

I have not the smallest doubt that this donation (when the navigation is in complete operation, which it certainly will be in less than two years,) will amount to £1200 or £1500 sterling a year, and become a rapidly increasing fund. The proprietors of the Federal City have talked of doing something handsome towards it likewise; and if Congress would appropriate some of the western lands to the same uses, funds sufficient, and of the most permanent and increasing sort, might be so established as to invite the ablest professors in Europe to conduct it.

In a letter to Hamilton, dated Sept. 6, 1796, Washington adds:

If you think the idea of a university had better be reserved for the speech at the opening of the session, I am content to defer the communication of it until that period: but even in that case, I would pray you, as soon as convenient, to make a draft for the occasion, predicated on the ideas with which you have been furnished: looking at the same time at what was said on this head in my *second* speech to the *first* Congress, merely with a view to see what was said on the subject at that time; and this, you will perceive, was not so much to the point as I want to express now, though it may, if proper, be glanced at, to show that the subject had caught my attention early.

I much question whether a recommendation of this measure to the legislature will have a better effect *now* than *formerly*. It may show, indeed, my sense of its importance, and that is a sufficient inducement with me to bring the matter before the public in some shape or another at the close of my political life. My object in proposing to insert it when I did, was to set the *people* ruminating on the importance of the measure, as the most likely means of bringing it to pass.

In his Farewell Address to the people of the United States, dated September 17, 1796, Washington gave utterance to that noble sentiment which has passed into an axiom of political philosophy:—

Promote, as an object of primary importance, institutions for the general diffusion of knowledge. In proportion as the structure of a government gives force to public opinion, it is essential that public opinion should be enlightened.

Washington did not confine the expressions of his interest in education, and especially the establishment of a national university, to his official communications to Congress and to the people of the United States. In a letter addressed to Mr. Adams, the Vice President, dated Nov. 27, 1794, on a proposition communicated by Mr. Jefferson, for “transplanting the members entire of the University of Geneva to America,” there is the following passage:—

That a national university in this country is a thing to be desired, has always been my decided opinion; and the appropriation of ground and funds for it in the Federal City has long been contemplated and talked of; but how far matured, or how far the transporting of an entire seminary of foreigners, who may not understand our language, can be assimilated therein, is more than I am prepared to give an opinion upon; or, indeed, how far funds in either case are attainable.

On 28th of January, 1795, Washington addressed from Philadelphia, the following letter to the Commissioners of the Federal District:—

GENTLEMEN—A plan for the establishment of a university in the Federal City has frequently been the subject of conversation; but, in what manner it is proposed to commence this important institution, on how extensive a scale, the means by which it is to be effected, how it is to be supported, or what progress is made in it, are matters altogether unknown to me.

It has always been a source of serious reflection and sincere regret with me, that the youth of the United States should be sent to foreign countries for the purpose of education. Although there are doubtless many, under these circumstances, who escape the danger of contracting principles unfavorable to republican government, yet we ought to deprecate the hazard attending ardent and susceptible minds, from being too strongly and too early prepossessed in favor of other political systems, before they are capable of appreciating their own.

For this reason I have greatly wished to see a plan adopted, by which the arts, sciences, and belles-lettres could be taught in their fullest extent, thereby embracing all the advantages of European tuition, with the means of acquiring the liberal knowledge, which is necessary to qualify our citizens for the exigencies of public as well as private life; and (which with me is a consideration of great magnitude) by assembling the youth from the different parts of this rising republic, contributing from their intercourse and interchange of information to the removal of prejudices, which might perhaps sometimes arise from local circumstances.

The Federal City, from its centrality and the advantages which in other respects it must have over any other place in the United States, ought to be preferred, as a proper site for such a university. And if a plan can be adopted upon a scale as extensive as I have described, and the execution of it should commence under favorable auspices in a reasonable time, with a fair prospect of success, I will grant in perpetuity fifty shares in the navigation of the Potomac River towards the endowment of it.

What annuity will arise from these fifty shares, when the navigation is in full operation, can at this time be only conjectured; and those, who are acquainted with it, can form as good a judgment as myself.

As the design of this university has assumed no form with which I am acquainted, and as I am equally ignorant who the persons are, who have taken or are disposed to take the maturing of the plan upon themselves, I have been at a loss to whom I should make this communication of my intentions. If the Commissioners of the Federal City have any particular agency in bringing the matter forward, then the information, which I now give to them, is in its proper course. If, on the other hand, they have no more to do in it than others, who may be desirous of seeing so important a measure carried into effect, they will be so good as to excuse my using them as the medium for disclosing these my intentions; because it appears necessary, that the funds for the establishment and support of the institution should be known to the promoters of it; and I see no mode more eligible for announcing my purpose.

In February, 1795, Mr. Jefferson addressed from Monticello a letter to President Washington, in reference to a proposition of M. D'Ivernois, and the Professors of the University of Geneva, Switzerland, to remove in a body to the United States, and establish here a University, "comprehending a College of Languages, preparatory to the principal one of Sciences, and also a third one for the gratuitous teaching of reading and writing to the poor." Mr. Jefferson, in view of a previous communication from Washington, as to his intention to aid by testamentary devise, the establishment of a National University, thinks the acceptance of this proposition, with modifications, will give "the institution at the outset such *éclat*, and such solid advantages, as would insure a very general concourse

to it of the youths from all our States, and probably from other parts of America."

The composition of the academy can not be settled there. It must be adapted to our circumstances, and can therefore only be fixed between them and persons here acquainted with those circumstances, and conferring for the purpose after their arrival here. For a country so marked for agriculture as ours, I should think no professorship so important as one not mentioned by them, a professor of agriculture, who, before the students should leave college, should carry them through a course of lectures on the principles and practice of agriculture; and that this professor should come from no country but England. Indeed I should mark Young as the man to be obtained. These, however, are modifications to be left till their arrival here.

To this letter, Washington replied on the 15th of March, 1795:—

I had little hesitation in giving the Federal City a preference over all other places for the institution, for the following reasons. First, on account of its being the permanent seat of the government of this Union, and where the laws and policy of it must be better understood than in any local part thereof. Secondly, because of its centrality. Thirdly, because one half (or near it) of the District of Columbia is within the Commonwealth of Virginia, and the whole of the State not inconvenient thereto. Fourthly, because, as a part of the endowment, it would be useful, but alone would be inadequate to the end. Fifthly, because many advantages, I conceive, would result from the jurisdiction which the general government will have over it, which no other spot would possess. And, lastly, as this seminary is contemplated for the completion of education and study of the sciences, not for boys in their rudiments, it will afford the students an opportunity of attending the debates in Congress, and thereby becoming more liberally and better acquainted with the principles of law and government.

My judgment and my wishes point equally strong to the application of the James River shares to the same subject at the same place; but, considering the source from whence they were derived, I have, in a letter I am writing to the executive of Virginia on this subject, left the application of them to a seminary within the State, to be located by the legislature.

Hence you will perceive, that I have in a degree anticipated your proposition. I was restrained from going the whole length of the suggestion by the following considerations. First, I did not know to what extent or when any plan would be so matured for the establishment of a university, as would enable any assurances to be given to the application of M. D'Ivernois. Secondly, the propriety of transplanting the professors in a body might be questioned for several reasons; among others, because they might not be all good characters, nor all sufficiently acquainted with our language. And again, having been at variance with the leveling party of their own country, the measure might be considered as an aristocratical movement by more than those, who, without any just cause that I can discover, are continually sounding the bell of aristocracy. And, thirdly, because it might preclude some of the first professors in other countries from a participation, among whom some of the most celebrated characters in Scotland, in this line, might be obtained.

My letter to the commissioners has bound me to the fulfillment of what is therein engaged; and if the Legislature of Virginia, on considering the subject, should view it in the same light as I do, the James River shares will be added thereto; for I think one good institution of this sort is to be preferred to two imperfect ones, which, without other aid than the shares in both navigations, is more likely to fall through, than to succeed upon the plan I contemplate; which is, in a few words, to supersede the necessity of sending the youth of this country abroad for the purpose of education, where too often principles and habits unfriendly to republican government are imbibed, and not easily discarded. Instituting such a one of our own, as will answer the end, and associating them in the same seminary, will contribute to wear off those prejudices and unreasonable jealousies, which prevent or weaken friendships and impair the harmony of the Union.

On the 16th of March, 1795, Washington addressed the following letter to Gov. Brooke of Virginia:—

SIR:—Ever since the General Assembly of Virginia were pleased to submit to my disposal fifty shares in the Potomac, and one hundred in the James River Company, it has been my anxious desire to appropriate them to an object most worthy of public regard.

It is with indescribable regret, that I have seen the youth of the United States migrating to foreign countries, in order to acquire the higher branches of erudition, and to obtain a knowledge of the sciences. Although it would be injustice to many to pronounce the certainty of their imbibing maxims not congenial with republicanism, it must nevertheless be admitted, that a serious danger is encountered by sending abroad among other political systems those who have not well learned the value of their own.

The time is therefore come, when a plan of universal education ought to be adopted in the United States. Not only do the exigencies of public and private life demand it, but, if it should ever be apprehended, that prejudice would be entertained in one part of the Union against another, an efficacious remedy will be, to assemble the youth of every part under such circumstances as will, by the freedom of intercourse and collision of sentiment, give to their minds the direction of truth, philanthropy, and mutual conciliation.

It has been represented, that a university corresponding with these ideas is contemplated to be built in the Federal City, and that it will receive considerable endowments. This position is so eligible from its centrality, so convenient to Virginia, by whose legislature the shares were granted and in which part of the Federal District stands, and combines so many other conveniences, that I have determined to vest the Potomac shares in that university.

Presuming it to be more agreeable to the General Assembly of Virginia, that the shares in the James River Company should be reserved for a similar object in some part of that State, I intend to allot them for a seminary to be erected at such place as they shall deem most proper. I am disposed to believe, that a seminary of learning upon an enlarged plan, but yet not coming up to the full idea of a university, is an institution to be preferred for the position which is to be chosen. The students, who wish to pursue the whole range of science, may pass with advantage from the seminary to the university, and the former by a due relation may be rendered coöperative with the latter.

I can not however dissemble my opinion, that if all the shares were conferred on a university, it would become far more important, than when they are divided; and I have been constrained from concentrating them in the same place, merely by my anxiety to reconcile a particular attention to Virginia with a great good, in which she will abundantly share in common with the rest of the United States.

I must beg the favor of your Excellency to lay this letter before that honorable body, at their next session, in order that I may appropriate the James River shares to the place which they may prefer. They will at the same time again accept my acknowledgments for the opportunity, with which they have favored me, of attempting to supply so important a desideratum in the United States as a university adequate to our necessity, and a preparatory seminary.

This letter was accordingly communicated to the Assembly at their next session, when the following resolves were passed:—

IN THE HOUSE OF DELEGATES, *December 1st, 1795.*

Whereas the migration of American youth to foreign countries, for the completion of their education, exposes them to the danger of imbibing political prejudices disadvantageous to their own republican forms of government, and ought therefore to be rendered unnecessary and avoided;

Resolved, that the plan contemplated of erecting a university in the Federal City, where the youth of the several States may be assembled, and their course of education finished, deserves the countenance and support of each State.

And whereas, when the General Assembly presented sundry shares in the James River and Potomac Companies to George Washington, as a small token

of their gratitude for the great, eminent, and unrivaled services he had rendered to this Commonwealth, to the United States, and the world at large, in support of the principles of liberty and equal government, it was their wish and desire that he should appropriate them as he might think best; and whereas, the present General Assembly retain the same high sense of his virtues, wisdom, and patriotism;

Resolved, therefore, that the appropriation by the said George Washington of the aforesaid shares in the Potomac Company to the university, intended to be erected in the Federal City, is made in a manner most worthy of public regard, and of the approbation of this Commonwealth.

Resolved, also, that he be requested to appropriate the aforesaid shares in the James River Company to a seminary at such place in the upper country, as he may deem most convenient to a majority of the inhabitants thereof.

The following are provisions of Washington's last Will:—

—As it has always been a source of serious regret with me to see the youth of these United States sent to foreign countries for the purposes of education, often before their minds were formed, or they had imbibed any adequate ideas of the happiness of their own; contracting, too frequently, not only habits of dissipation and extravagance, but *principles unfriendly to republican government, and to the true and genuine liberties of mankind*, which thereafter are rarely overcome; for these reasons it has been my ardent wish to see a plan devised on a liberal scale, which would have a tendency to spread systematic ideas through all parts of this rising empire, thereby to do away local attachments and State prejudices, as far as the nature of things would, or indeed ought to admit, from our national councils. Looking anxiously forward to the accomplishment of so desirable an object as this is (in my estimation), my mind has not been able to contemplate any plan more likely to affect the measure, than the establishment of a University in a central part of the United States, to which youths of fortune and talents from all parts thereof may be sent for the completion of their education in all branches of polite literature, in arts and sciences, in acquiring knowledge in the principles of politics and good government; and, as a matter of infinite importance in my judgment, by associating with each other, and forming friendships in juvenile years, be enabled to free themselves in a proper degree from those local prejudices and habitual jealousies, which have just been mentioned, and which, when carried to excess, are never-failing sources of disquietude to the public mind, and pregnant with mischievous consequences to the country. Under these impressions,

I give and bequeath in perpetuity the fifty shares which I hold in the Potomac Company (under the aforesaid acts of the Legislature of Virginia,) towards the endowment of a university to be established within the limits of the District of Columbia, under the auspices of the general government, if that government should incline to extend a fostering hand towards it; and until such seminary is established, and the funds arising on these shares be required for its support, my further will and desire is, that the profit accruing therefrom shall, whenever the dividends are made, be laid out in purchasing stock in the bank of Columbia, or some other bank, at the discretion of my executors, or by the treasurer of the United States for the time being, under the direction of Congress, provided that honorable body should patronize the measure; and the dividends proceeding therefrom are to be vested in more stock, and so on until a sum adequate to the accomplishment of the object is obtained, of which I have not the smallest doubt before many years pass away, even if no aid or encouragement is given by legislative authority, or from any other source.

The hundred shares, which I hold in the James River Company, I have given, and now confirm, in perpetuity, to and for the use and benefit of Liberty Hall Academy, in the county of Rockbridge, in the commonwealth of Virginia.

We shall continue this Historical Development of the National Aspects of Education through successive administrations, down to the action of Congress at its last session—with a notice of which we introduce a speech from Gen. Garfield on the subject.



II. EDUCATION—A NATIONAL INTEREST.

SPEECH OF JAMES A. GARFIELD OF OHIO, IN THE HOUSE OF REPRESENTATIVES, JUNE 8TH, 1866, ON A BILL "TO ESTABLISH A NATIONAL BUREAU OF EDUCATION," REPORTED BY THE SELECT COMMITTEE* ON THE MEMORIAL OF THE NATIONAL ASSOCIATION OF SCHOOL SUPERINTENDENTS.

At the conclusion of a general discussion of the bill, the previous question upon the bill and the pending amendments was demanded and seconded, and the main question ordered;

Mr. GARFIELD spoke as follows: I did intend to make a somewhat elaborate statement of the reasons why the select committee recommended the passage of this bill; but I know the anxiety that many gentlemen feel to have this debate concluded, and to allow the private bills now on the calendar and set for this day, to be disposed of, and to complete as soon as possible the work of this session. I will, therefore, abandon my original purpose and restrict myself to a brief statement of a few leading points in the argument, and leave the decision with the House. I hope this waiving of a full discussion of the bill will not be construed into a confession that it is inferior in importance to any measure before the House; for I know of none that has a nobler object, or that more vitally affects the future of this nation.

I first ask the House to consider the magnitude of the interests involved in this bill. The very attempt to discover the amount of pecuniary and personal interest we have in our schools shows the necessity of such a law as is here proposed. I have searched in vain for any complete or reliable statistics showing the educational condition of the whole country. The estimates I have made are gathered from various sources and can only be approximately correct. I am satisfied, however, that they are far below the truth.

Even by the incomplete and imperfect educational statistics of the

*The Committee consisted of Garfield of Ohio, Patterson of New Hampshire, Boutwell of Massachusetts, Donnelly of Minnesota, Moulton of Illinois, Goodyear of New York, and Randall of Pennsylvania.

Census Bureau, it appears that in 1860, there were in the United States 115,224 common schools, 500,000 school officers, 150,241 teachers, and 5,477,037 scholars; thus showing that more than six millions of the people of the United States are directly engaged in the work of education.

Not only has this large proportion of our population been thus engaged, but the Congress of the United States has given fifty-three million acres of public lands to fourteen States and Territories of the Union for the support of schools. In the old ordinance of 1785, it was provided that one section of every township, one thirty-sixth of all the public lands of the United States, should be set apart and held forever sacred to the support of the schools of the country. In the ordinance of 1787, it was declared that "religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged."

It is estimated that at least \$50,000,000 have been given in the United States by private individuals for the support of schools. We have thus an interest, even pecuniarily considered, hardly second to any other. We have tolerably complete school statistics from only seventeen States of the Union.

Our Congressional Library contains no educational reports whatever from the remaining nineteen. In those seventeen States there are 90,835 schools, 190,000 teachers, 5,107,285 pupils, and \$34,000,000 annually appropriated by the Legislatures for the support and maintenance of common schools. Notwithstanding the great expenditures entailed upon them during five years of war, they raised by taxation \$34,000,000 annually for the support of common schools. In several States of the Union more than fifty per cent. of all the tax, imposed for State purposes, is for the support of common schools. And yet, gentlemen are impatient because we wish to occupy a short time in considering this bill!

I will not trouble the House by repeating common-places so familiar to every gentleman here, as that our system of government is based upon the intelligence of the people. But I wish to suggest that there never has been a time when all our educational forces should be in such perfect activity as at the present day.

Ignorance—stolid ignorance—is not our most dangerous enemy. There is very little of that kind of ignorance among the white population of this country.

In the Old World, among the despotic governments of Europe, the

great disfranchised class—the pariahs of political and social life—are indeed ignorant, mere inert masses, moved upon and controlled by the intelligent and cultivated aristocracy. Any unrepresented and hopelessly disfranchised class in a government will inevitably be struck with intellectual paralysis. Our late slaves afford a sad illustration.

But among the represented and voting classes of this country, where all are equal before the law, and every man is a political power for good or evil, there is but little of the inertia of ignorance. The alternatives are not education or no education; but shall the power of the citizen be directed aright towards industry, liberty, and patriotism, or, under the baneful influence of false theories and evil influences, shall it lead him continually downward till it ruin both him and the government?

If he is not educated in the school of virtue and integrity he will be educated in the school of vice and iniquity. We are, therefore, afloat on the sweeping current; we must make head against it, or we shall go down with it to the saddest of destinies.

According to the census of 1860 there were 1,218,311 free white inhabitants of the United States over twenty-one years of age who could not read nor write, and 871,418 of those were American-born citizens. One-third of a million of people are being annually thrown upon our shores from the Old World, a large per cent. of whom are uneducated, and the gloomy total has been swelled by the 4,000,000 slaves admitted to citizenship by the events of the war.

Such, Sir, is the immense force which we must now confront by the genius of our institutions and the light of our civilization. How shall it be done? An American citizen can give but one answer. We must pour upon them all the light of our public schools. We must make them intelligent, industrious, patriotic citizens, or they will drag us and our children down to their level. Does not this question rise to the full height of national importance and demand the best efforts of statesmanship to adjust it? Mr. Mann has well said:

“That legislators and rulers are responsible.

“In our country and in our times no man is worthy the honored name of a statesman who does not include the highest practicable education of the people in all of his plans of administration.

“He may have eloquence, he may have a knowledge of all history, diplomacy, jurisprudence, and by these he may claim, in other countries, the elevated rank of a statesman, but unless he speaks, plans, labors at all times and in all places for the culture and edification of the whole people, he is not, he cannot be an American statesman.”

Gentlemen who have discussed the bill this morning tell us that it will result in great expense to the government. Whether an enterprise is expensive or not is altogether a relative question, to be determined by the importance of its object.

Now, what have we done as a nation in the way of expenses? In 1882 we organized a Coast Survey Bureau, and have expended millions upon it. Its officers have triangulated thousands of miles of our coasts, have made soundings of all our bays and harbors, and carefully mapped the shoals, breakers, and coast lines from our northern boundary on the Atlantic to the extreme northern boundary on the Pacific coast. They have established eight hundred tidal stations to observe the fluctuations of the tides. We have expended vast sums in order perfectly to know the topography of our coasts, lakes and rivers, that we might make navigation more safe. Is it of no consequence that we explore the boundaries of that wonderful intellectual empire which incloses within its domain the fate of succeeding generations, and of this republic? The children of to-day will be the architects of our country's destiny in 1900.

We have established an Astronomical Observatory where the movements of the stars are watched, latitude and longitude calculated, and chronometers regulated for the benefit of navigation. For this Observatory we pay one third of a million per annum. Is it of no consequence that we observe the movements of those intellectual lights which shall, in the time to come, be guiding stars in our national firmament?

We have established a Light-House Board who are employing all the aids of science, to discover the best modes of regulating the beacons upon our shores; they are placing buoys as way-marks to guide ships safely into our harbors. Will you not create a light-house board to set up beacons for the coming generation, not as lights to the eye, but to the mind and heart, that shall lead them safely in the perilous voyage of life, and enable them to transmit the blessings of liberty to those who shall come after them?

We have set on foot a score of expeditions to explore the mountains and valleys, the lakes and rivers of this and other countries. We have expended money without stint to explore the Amazon and the Jordan, Chili and Japan, the gold shores of the Colorado and the copper cliffs of Lake Superior; to gather and publish the great facts of science, and to exhibit the material resources of physical nature. Will you refuse the pitiful sum of \$13,000 to collect and record the intellectual resources of this country, the elements that lie behind all material wealth and make it either a curse or a blessing?

We have paid three-quarters of a million dollars for the survey of the route for the Pacific railroad, and have published the results at a great cost in thirteen quarto volumes, with accompanying maps and charts. The money for these purposes was freely expended, and now, when it is proposed to appropriate \$13,000 to aid in increasing the intelligence of those who will use that great continental highway when it is completed, we are reminded of our debts, and warned against increasing our expenditures. It is difficult to treat such an objection with the respect that always is due in this hall of legislation.

We have established a Patent Office where are annually accumulated thousands of models of new machinery invented by our people. Will you make no expenditure for the benefit of the intelligence that shall stand behind that machinery and be its controller? Will you bestow all your favors upon the engine, and ignore the engineer? I will not insult the intelligence of this House by waiting to prove that money paid for education is the most economical of all expenditure; that it is cheaper to reduce crime than to build jails; that school houses are less expensive than rebellions. A tenth of our national debt expended in public education fifty years ago would have saved us the blood and treasure of the late war. A far less sum may save our children from a still greater calamity.

We expend hundreds of thousands annually to promote the agricultural interests of the country; to introduce the best methods in husbandry. Is it not of more consequence to do something for the farmer of the future than for the farm of to-day?

As man is more precious than soil, as the immortal spirit is nobler than the clod it animates, so is the object of this bill more important than any mere pecuniary interest.

The genius of our government does not allow us to establish a compulsory system of education, as is done in some of the countries of Europe. There are States in this Union, however, which have adopted a compulsory system, and perhaps that is well. It is for each State to determine. A distinguished gentleman from Rhode Island told me lately that it is now the law in that State that every child within its borders shall attend school, and that every vagrant child shall be taken in charge by the authorities and sent to school. It may be well for other States to pursue the same course; but probably the general government can do nothing of the sort. Whether it has the right of compulsory control or not, we propose none in this bill.

But we do propose to use that power, so effective in this country, of letting in light on subjects, and holding them up to the verdict of

public opinion. If it could be published annually from this capitol, through every school district of the United States, that there are States in the Union that have no system of common schools; and if their records could be placed beside the records of such States as Massachusetts, New York, Pennsylvania, Ohio and other States that have a common school system, the mere statement of the fact would rouse their energies, and compel them for shame to educate their children. It would shame out of their delinquency all the delinquent States.

Mr. Speaker, if I were called upon to-day to point to that in my own State of which I am most proud, I would not point to any of the flaming lines of her military record, to the heroic men and the brilliant officers she gave to the late contest: I would not point to any of her leading men of the past or the present; but I would point to her common schools; I would point to the honorable fact that in the great struggle of five years through which we have just passed, she has expended \$12,000,000 for the support of her public schools. I do not include in that amount the sums expended upon our higher institutions of learning. I would point to the fact that fifty-two per cent of the taxation of Ohio for the last five years, aside from the war tax and the tax for the payment of her public debt, has been for the support of her schools. I would point to the schools of Cincinnati, Cleveland, Toledo, and other cities of the State, if I desired a stranger to see the glory of Ohio. I would point to the thirteen thousand school houses and the seven hundred thousand pupils in the schools of Ohio. I would point to the \$3,000,000 she has paid for schools during the last year alone. This, in my judgment, is the proper gauge by which to measure the progress and glory of States.

Gentlemen tell us there is no need of this bill—the States are doing well enough now. Do they know through what a struggle every State has come up, that has secured a good system of common schools. Let me illustrate this by the example of Pennsylvania. Notwithstanding the early declaration of William Penn—

“That which makes a good constitution must keep it, namely, men of wisdom and virtue; qualities that because they descend not with worldly inheritance must be carefully propagated by a virtuous education of youth, for which spare no cost, for by such parsimony all that is saved is lost,”

notwithstanding that wise master builder incorporated this sentiment in his “framework of government” and made it the duty of the governor and council “to establish and support public schools;” notwithstanding Benjamin Franklin, from the first hour he became a

citizen of Pennsylvania, inculcated the value of useful knowledge to every human being in every walk of life, and by his personal and pecuniary effort did establish schools and a college for Philadelphia; notwithstanding the constitution of Pennsylvania made it obligatory upon the Legislature to foster the education of the citizens; notwithstanding all this, it was not till 1833-34 that a system of common schools, supported in part by taxation of property of the State, for the common benefit of all the children of the State, was established by law; and although the law was passed by an almost unanimous vote of both branches of the Legislature, so foreign was the idea of public schools to the habits of the people, so odious was the idea of taxation for this purpose, that even the poor who were to be specially benefited, were so deluded by political demagogues as to clamor for its repeal.

Many members who voted for the law lost their nominations, and others, although nominated, lost their election. Some were weak enough to pledge themselves to a repeal of the law; and in the session of 1835 there was an almost certain prospect of its repeal and the adoption in its place of an odious and limited provision for educating the children of the poor by themselves. In the darkest hour of the debate, when the hearts of the original friends of the system were failing from fear, there rose on the floor of the House one of its early champions, one who, though not a native of the State, felt the disgrace which the repeal of this law would inflict, like a knife in his bosom; one who, though no kith or kin of his would be benefited by the operations of the system, and though he should share its burdens, he would only partake with every citizen in its blessings; one who had voted for the original law although introduced by his political opponents, and who had defended and gloried in his vote before an angry and unwilling constituency; this man, then in the beginning of his public career, threw himself into the conflict, and by his earnest and brave eloquence saved the law, and gave a noble system of common schools to Pennsylvania.

I doubt if, at this hour, after the thirty years crowded full of successful labors at the bar, before the people, and in halls of legislation, the venerable and distinguished member [Mr. STEVENS], who now represents a portion of the same State in this House, can recall any speech of his life with half the pleasure he does that, for no measure with which his name has been connected is so fraught with blessings to hundreds of thousands of children, and to homes innumerable. I hold in my hand a copy of his brave speech, and I ask the clerk to read the passages I have marked:

"I am comparatively a stranger among you, born in another, in a distant State; no parent or kindred of mine did, does, or probably ever will dwell within your borders. I have none of those strong cords to bind me to your honor and your interest; yet, if there is any one thing on earth which I ardently desire above all others, it is to see Pennsylvania standing up in her intellectual, as she confessedly does in her physical resources, high above all her confederate rivals. How shameful then, would it be for these her native sons, to feel less so, when the dust of their ancestors is mingled with her soil, their friends and relatives enjoy her present prosperity, and their descendants, for long ages to come, will partake of her happiness or misery, her glory or her infamy!" * *

"In giving this law to posterity, you act the part of the philanthropist, by bestowing upon the poor as well as the rich, the greatest earthly boon which they are capable of receiving; you act the part of the philosopher by pointing, if you do not lead them, up the hill of science; you act the part of the hero, if it be true, as you say, that popular vengeance follows close upon your footsteps. Here then, if you wish true popularity, is a theater on which you may acquire it." * * *

"Let all, therefore, who would sustain the character of the philosopher or philanthropist, sustain this law. Those who would add thereto the glory of the hero, can acquire it here; for, in the present state of feeling in Pennsylvania, I am willing to admit that but little less dangerous to the public man is the war-club and battle-axe of savage ignorance than to the lion-hearted Richard was the keen cimex of the Saracen. He who would oppose it, either through inability to comprehend the advantages of general education, or from unwillingness to bestow them on all his fellow citizens, even to the lowest and the poorest, or from dread of popular vengeance, seems to want either the head of the philosopher, the heart of the philanthropist, or the nerve of the hero."

He has lived long enough to see this law, which he helped to found in 1834, and more than any other man was instrumental in saving from repeal in 1835, expanded and consolidated into a noble system of public instruction. Twelve thousand schools have been built by the voluntary taxation of the people, to the amount, for school houses alone, of nearly ten million dollars. Many millions of children have been educated in these schools. More than seven hundred thousand attended the public schools of Pennsylvania in 1864-65, and their annual cost, provided by voluntary taxation in the year 1864, was nearly three million dollars, giving employment to sixteen thousand teachers.

It is glory enough for one man to have connected his name so honorably with the original establishment and effective defense of such a system.

But it is said that the thirst for knowledge among the young; the pride and ambition of parents for their children, are agencies powerful enough to establish and maintain thorough and comprehensive systems of education.

This suggestion is answered by the unanimous voice of publicists and political economists. They all admit that the doctrine of "Demand and Supply" does not apply to educational wants. Even the most extreme advocates of the principle of *laissez faire* as a sound maxim of political philosophy, admit that governments must interfere in aid of education. We must not wait for the *wants* of the rising generation to be expressed in a *demand* for means of education. We must ourselves discover and supply their *needs*, before the time for supplying them has forever passed. John Stuart Mill says :

"But there are other things, of the worth of which the demand of the market is by no means a test ; things of which the utility does not consist in ministering to inclinations, nor in serving the daily uses of life, and the want of which is least felt where the need is greatest. This is peculiarly true of those things which are chiefly useful as tending to raise the character of human beings. The uncultivated can not be judges of cultivation.

"Those who most need to be made wiser and better, usually desire it least, and if they desired it, would be incapable of finding the way to it by their own lights. It will continually happen on the voluntary system, that, the end not being desired, the means will not be provided at all, or that the persons requiring improvement having an imperfect or altogether erroneous conception of what they want, the supply called forth by the demand of the market, will be any thing but what is really required. Now any well intentioned and tolerably civilized government may think, without presumption, that it does, or ought to possess a degree of cultivation above the average of the community which it rules, and that it should, therefore, be capable of offering better education and better instruction to the people, than the greater number of them would spontaneously select.

"Education, therefore, is one of those things which it is admissible in principle that the government should provide for the people. The case is one to which the reasons of the non-interference principle do not necessarily or universally extend.

"With regard to elementary education, the exception to ordinary rules may, I conceive, justifiably be carried still further. There are certain primary elements and means of knowledge which it is in the highest degree desirable that all human beings born into the community should acquire during childhood. If their parents, or those on whom they depend, have the power of obtaining for them this instruction, and fail to do it, they commit a double breach of duty ; toward the children themselves, and toward the members of the community generally, who are all liable to suffer seriously from the consequences of ignorance and want of education in their fellow citizens. It is, therefore, an allowable exercise of government to impose on parents the legal obligation of giving elementary instruction to children. This, however, can not fairly be done without taking measures to insure that such instruction shall always be accessible to them, either gratuitously or at a trifling expense."

This is the testimony of economic science. I trust the statesmen

of this Congress will not think the subject of education too humble a theme for their most serious consideration. It has engaged the earnest attention of the best men of ancient and modern times, especially of modern statesmen and philanthropists.

I will fortify myself in the positions I have taken by quoting the authority of a few men who are justly regarded as teachers of the human race. If I keep in their company I can not wander far from the truth. I can not greatly err while I am guided by their counsel.

In his eloquent essay entitled *Way to establish a Free Commonwealth*, John Milton said :

"To make the people fittest to choose, and the chosen fittest to govern, will be to mend our corrupt and faulty education, to teach the people faith, not without virtue, temperance, modesty, sobriety, economy, justice ; not to admire wealth or honor ; to hate turbulence and ambition ; to place every one his private welfare and happiness in the public peace, liberty and safety."

England's most venerable living statesman, Lord Brougham, enforced the same truth in these noble words :

"Lawgivers of England ! I charge ye, have a care ! Be well assured that the contempt lavished upon the cabals of Constantinople, when the council disputed on a text, while the enemy, the derider of all their texts, was thundering at the gate, will be a token of respect compared with the loud shout of universal scorn which all mankind in all ages will send up against you, if you stand still and suffer a far deadlier foe than the Turcoman,—suffer the parent of all evil, all falsehood, all hypocrisy, all discharity, all self-seeking—him who covers over with pretexts of conscience the pitfalls that he digs for the souls on which he preys,—to stalk about the fold and lay waste its inmates—stand still and make no head against him, upon the vain pretext to soothe your indolence, that your action is obstructed by religious cabals—upon the far more guilty speculation, that by playing a party game you can turn the hatred of conflicting professors to your selfish purposes !

"Let the soldier be abroad, if he will ; he can do nothing in this age. There is another personage abroad, a person less imposing—in the eye of some insignificant. The Schoolmaster is abroad, and I trust to him, armed with his primer, against the soldier in full uniform array."

Lord Brougham gloried in the title of schoolmaster, and contrasted his work with that of the military conqueror in these words :

"The conqueror stalks onward with the 'pride, pomp and circumstance of war,' banners flying, shouts rending the air, guns thundering, and martial music pealing, to drown the shrieks of the wounded and the lamentations for the slain. Not thus the schoolmaster in his peaceful vocation. He meditates and prepares in secret the plans which are to bless mankind ; he slowly gathers around him those who are to further their execution ; he quietly, though firmly, advances in his humble path laboring steadily, but calmly, till he has opened to

the light all the recesses of ignorance, and torn up by the roots the weeds of vice. His is a progress not to be compared with any thing like a march; but it leads to a far more brilliant triumph, and to laurels more imperishable than the destroyer of his species, the scourge of the world, ever won."

The learned and brilliant Guizot, who regarded his work in the office of Minister of Public Instruction, in the government of France, the noblest and most valuable work of his life, has left us this valuable testimony.

"Universal education is henceforth one of the guarantees of liberty and social stability. As every principle of our government is founded on justice and reason, to diffuse education among the people, to develop their understandings and enlighten their minds, is to strengthen their constitutional government and secure its stability."

In his Farewell Address, Washington wrote these words of wise counsel:

"Promote, as an object of primary importance, institutions for the general diffusion of knowledge. In proportion as the structure of a government gives force to public opinion, it is essential that public opinion should be enlightened."

In his Inaugural Message, when first taking the Presidential chair, the elder Adams said:

"The wisdom and generosity of the legislature in making liberal appropriations in money for the benefit of schools, academies and colleges, is an equal honor to them and to their constituents, a proof of their veneration for letters and science, and a portent of great and lasting good to North and South America and to the world. Great is truth—great is liberty—great is humanity—and they must and will prevail."

Chancellor Kent used this decided language:

"The parent who sends his son into the world uneducated, defrauds the community of a lawful citizen, and bequeaths to it a nuisance."

I shall conclude the citation of opinions with the stirring words of Edward Everett:

"I know not to what we can better liken the strong appetite of the mind for improvement than to a hunger and thirst after knowledge and truth, nor how can we better describe the province of education than to say, it does that for the intellect which is done for the body, when it receives the care and nourishment which are necessary for its growth, health and strength.

"From this comparison I think I derive new views of the importance of education. It is now a solemn duty, a tender, sacred trust.

"What! feed a child's body, and let his soul hunger! pamper his limbs and starve his faculties!

"Plant the earth, cover a thousand hills with your droves of cattle, pursue the fish to their hiding places in the sea, and spread out your wheat fields across the plains in order to supply the wants of that body, which will soon be as cold and senseless as their poorest clod, and let the pure spiritual essence within you, with all its glorious capacities for improvement, languish and pine! What! build factories, turn in rivers upon the waterwheels, unchain the imprisoned spirits of steam, to weave a garment for the body, and let the soul remain unadorned and naked!

"What! send out your vessels to the farthest ocean, and make battle with the monsters of the deep, in order to obtain the means of lighting up your dwellings and workshops, and prolonging the hours of labor for the meat that perisheth, and permit that vital spark, which God has kindled, which He has intrusted to our care, to be fanned into a bright and heavenly flame; permit it, I say, to languish and go out!"

It is remarkable that so many good things have been said, and so few things done by our national statesmen in favor of education. If we inquire what has been done by the governments of other countries to support and advance public education, we are compelled to confess with shame that every government in christendom has given a more intelligent and effective support to schools than has our own.

The free cities of Germany organized the earliest school systems after the separation of church and state. The present schools of Hamburg have existed more than 1,000 years. The earliest school codes were framed in the Duchy of Wurtemberg, in 1565, and in the Electorate of Saxony in 1580. Under these codes were established systems of schools, more perfect, it is claimed, than the school system of any State of the American union. Their systems embraced the gymnasium and the university, and were designed, as their laws expressed it, "to carry youth from the elements to the degree of culture demanded for offices in church and state."

The educational institutions of Prussia are too well known to need a comment. It is a sufficient index of their aim and high character that a late Prussian school officer said of his official duties:

"I promised God that I would look upon every Prussian peasant-child as a being who could complain of me before God if I did not provide for him the best education as a man and a christian which it was possible for me to provide."

France did not think herself dishonored by learning from a nation which she had lately conquered; for when, in 1831, she began to provide more fully for the education of her people, she sent the philosopher Cousin to Holland and Prussia, to study and report upon the schools of those States. Guizot was made Minister of Public Instruction, and held the office from 1832 to 1837. In 1833 the report

of Cousin was published, and the educational system of France was established on the Prussian model.

No portion of his brilliant career reflects more honor upon Guizot than his five years' work for the schools of France. The fruits of his labors were not lost in the revolutions that followed. The present emperor is giving his best efforts to the perfection and maintenance of schools, and is endeavoring to make the profession of the teacher more honorable and desirable than it has been hitherto.

Through the courtesy of the Secretary of State, I have obtained the last annual report of the Minister of Public Instruction in France, which exhibits the present state of education in that empire.

At the last enumeration there were in France, in the colleges and lyceums, 65,832 pupils, in the secondary schools, 200,000, and in the primary or common schools, 4,720,234.

Besides the large amount raised by local taxation, the imperial government appropriated, during the year 1865, 2,349,051 francs for the support of primary schools.

Teaching is one of the regular professions in France, and the government offers prizes, and bestows honors upon the successful instructor of children. During the year 1865, 1,154 prizes were distributed to teachers in primary schools.

An order of honor, and a medal worth 250 francs, is awarded to the best teacher in each commune.

After a long and faithful service in his profession, the teacher is retired on half pay, and, if broken down in health, is pensioned for life. In 1865, there were 4,245 teachers on the pension list of France. The Minister says in his report: "The statesmen of France have determined to show that the country knows how to honor those who serve her even in obscurity."

Since 1862, 10,243 libraries for the use of common schools have been established, and they now contain 1,117,952 volumes, more than a third of which have been furnished by the imperial government. Half a million text-books are furnished for the use of children who are too poor to buy them. It is the policy of France to afford the means of education to every child in the empire.

When we compare the conduct of other governments with our own, we can not accuse ourselves so much of illiberality, as of reckless folly in the application of our liberality to the support of schools. No government has expended so much to so little purpose. To fourteen States alone we have given, for the support of schools, 83,000 square miles of land; or an amount of territory nearly equal to two

such States as Ohio. But how has this bountiful appropriation been applied? This chapter in our history has never been written. No member of this House or the Senate; no executive officer of the government now knows, and no man ever did know, what disposition has been made of this immense bounty. This bill requires the Commissioner of Education to report to Congress what lands have been given to schools, and how the proceeds have been applied. If we are not willing to follow the example of our fathers in giving, let us, at least, perpetuate the record of their liberality, and preserve its beneficent results.

Mr. Speaker: I have thus hurriedly and imperfectly exhibited the magnitude of the interests involved in the education of American youth; the peculiar condition of affairs which demand at this time, an increase of our educational forces; the failure of a majority of the States to establish school systems; the long struggles through which others have passed in achieving success, and the humiliating contrast between the action of our government, and those of other nations in reference to education; but I can not close without referring to the bearing of this measure upon the peculiar work of this Congress.

When the history of the XXXIX Congress is written, it will be recorded that two great purposes inspired it, and made their impress upon all its efforts, viz: to build up free States on the ruins of slavery, and to extend to every inhabitant of the United States the rights and privileges of citizenship.

Before the divine Architect builded order out of chaos, He said, "let there be light." Shall we commit the fatal mistake of building up free States without expelling the darkness in which slavery shrouded them? Shall we enlarge the boundaries of citizenship and make no provision to increase the intelligence of the citizen?

I share most fully in the aspirations of this Congress, and give my most cordial support to its policy; but I believe its work will prove a disastrous failure unless it makes the schoolmaster its ally, and aids him in preparing the children of the United States to perfect the work now begun.

The stork is a sacred bird in Holland, and is protected by public law, because it destroys those insects which would undermine the dikes and let the sea again overwhelm the rich fields of the Netherlands. Shall this government do nothing to foster and strengthen those educational agencies which alone can shield the coming generation from ignorance and vice, and make it the impregnable bulwark of liberty and law?

I know that this measure presents few attractions to those whose chief work is to watch the political movements that relate only to nominating conventions and elections. The mere politician will see in it nothing valuable, for the millions of children to be benefited by it, can give him no votes. But I appeal to those who care more for the future safety and glory of this nation than for any mere temporary advantage, to aid in giving to education the public recognition and active support of the Federal government.

The final action of the House on the bill was not reached till the 19th of June, when the question being taken by yeas and nays, it was passed by a vote of 20 yeas to 44 nays, with the following title and provisions

AN ACT TO ESTABLISH A DEPARTMENT OF EDUCATION.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be established, at the city of Washington, a Department of Education for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of diffusing such information respecting the organization and management of schools and school systems, and methods of teaching, as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education throughout the country.

SEC. 2. *And be it further enacted,* That there shall be appointed by the President, by and with the advice and consent of the Senate, a Commissioner of Education, who shall be intrusted with the management of the department herein established, and who shall receive a salary of four thousand dollars per annum, and who shall have authority to appoint one chief clerk of his department, who shall receive a salary of two thousand dollars per annum, one clerk who shall receive a salary of eighteen hundred dollars per annum, and one clerk who shall receive a salary of sixteen hundred dollars per annum, which said clerks shall be subject to the appointing and removing power of the Commissioner of Education.

SEC. 3. *And be it further enacted,* That it shall be the duty of the Commissioner of Education to present annually to Congress a report embodying the results of his investigations and labors, together with a statement of such facts and recommendations as will, in his judgment, subserve the purpose for which this department is established. In the first report made by the Commissioner of Education under this act there shall be presented a statement of the several grants of land made by Congress to promote education, and the manner in which these several trusts have been managed, the amount of funds arising therefrom, and the annual proceeds of the same, as far as the same can be determined.

SEC. 4. *And be it further enacted,* That the Commissioner of Public Buildings is hereby authorized and directed to furnish proper offices for the use of the department herein established.

The Bill, in the Senate, was referred to the Standing Committee on the Judiciary, who recommended its passage without amendment; and, after a debate on the 26th of Feb., 1867, on a motion to substitute Bureau for Department, was passed without division on the 1st of March, and signed by the President on the 2d. On the 11th of March, HENRY BARNARD was nominated by President JOHNSON, on the 16th was confirmed by the unanimous vote of the Senate, and on the 17th entered on the duties of Commissioner of Education.

NATIONAL DEPARTMENT OF EDUCATION.

The undersigned desires to obtain, as early as practicable, accurate but condensed information of the designation, history, and present condition of every Institution and Agency of Education in the United States, and of the name, residence, and special work of every person in the administration, instruction, and management of the same. Any response to this Circular in reference to any Institution, Agency, or subject included in the following Schedule, addressed to the *Department of Education, Washington, D. C.*, and indorsed "official," is entitled, by direction of the Postmaster General, to be conveyed by mail *free* of postage, and will be thankfully received by

HENRY BARNARD,
Commissioner of Education, Washington, D. C.

SCHEDULE OF INFORMATION SOUGHT RESPECTING SYSTEMS, INSTITUTIONS, AND AGENCIES OF EDUCATION.

A. General Condition, (of District, Village, City, County, State.)

Territorial Extent, Municipal Organization, Population, Valuation, Receipts, and Expenditures for all public purposes.

B. System of Public Instruction.

C. Incorporated Institutions, and Other Schools and Agencies of Education.

I. ELEMENTARY OR PRIMARY EDUCATION.

(Public, Private, and Denominational; and for boys or girls.)

II. ACADEMIC OR SECONDARY EDUCATION.

(Institutions mainly devoted to studies not taught in the Elementary Schools, and to preparation for College or Special Schools.)

III. COLLEGIATE OR SUPERIOR EDUCATION.

(Institutions entitled by law to grant the degree of Bachelor of Arts or Science.)

IV. PROFESSIONAL, SPECIAL, OR CLASS EDUCATION.

(Institutions having special studies and training, such as—1. Theology. 2. Law. 3. Medicine. 4. Teaching. 5. Agriculture. 6. Architecture, (Design and Construction.) 7. Technology—Polytechnic. 8. Engineering, (Civil or Mechanical.) 9. War, (on land or sea.) 10. Business or Trade. 11. Navigation. 12. Mining and Metallurgy. 13. Drawing and Painting. 14. Music. 15. Deaf-mutes. 16. Blind. 17. Idiotic. 18. Juvenile offenders. 19. Orphan. 20. Girls. 21. Colored or Freedmen. 22. Manual or Industrial. 23. *Not specified above*—such as Chemistry and its applications—Modern Languages—Natural History and Geology—Steam and its applications,—Pharmacy—Veterinary Surgery, &c.)

V. SUPPLEMENTARY EDUCATION.

1. Sunday and Mission Schools. 2. Apprentice Schools. 3. Evening Schools. 4. Courses of Lectures. 5. Lyceums for Debates. 6. Reading Rooms—Periodicals. 7. Libraries of Reference or Circulation. 8. Gymnasiums, Boat and Ball Clubs, and other Athletic Exercises. 9. Public Gardens, Parks and Concerts. 10. *Not specified above.*

VI. SOCIETIES, INSTITUTES, MUSEUMS, CABINETS, AND GALLERIES FOR THE ADVANCEMENT OF EDUCATION, SCIENCE, LITERATURE, AND THE ARTS.

VII. EDUCATIONAL AND OTHER PERIODICALS.

VIII. SCHOOL FUNDS AND EDUCATIONAL BENEFACTIONS.

IX. LEGISLATION (STATE OR MUNICIPAL) RESPECTING EDUCATION.

X. SCHOOL ARCHITECTURE.

XI. PENAL AND CHARITABLE INSTITUTIONS.

XII. CHURCHES AND OTHER AGENCIES OF RELIGIOUS INSTRUCTION.

XIII. REPORTS AND OTHER PUBLICATIONS ON SCHOOLS AND EDUCATION.

XIV. MEMOIRS OF TEACHERS, AND PROMOTERS OF EDUCATION.

XV. EXAMINATIONS (COMPETITIVE, OR OTHERWISE) FOR ADMISSION TO NATIONAL OR STATE SCHOOLS, OR TO PUBLIC SERVICE OF ANY KIND.

EDUCATIONAL LAND POLICY OF THE UNITED STATES.

The Act establishing the Department of Education makes it the duty of the Commissioner in his first report "to present a statement of the several grants of land made by Congress to promote education, and the manner in which these several trusts have been managed, the amount of funds arising therefrom, and the annual proceeds of the same as far as can be determined."

The following account of the Educational Land Policy of the United States, and of the disposition of the Congressional land grants in Minnesota are printed in advance of the report, not only to diffuse information, but to indicate the nature of the statistics that the Department desires to receive.

The growth of the public sentiment that led Congress to inaugurate the system of land grants for education was gradual. The first settlers of Massachusetts and Connecticut from the earliest period set apart lands for schools. In other colonies, before the Declaration of Independence, intelligent men felt the importance of some public provision for the education of the people, as private benevolence was found to be fitful and wholly inadequate. Doctor Samuel Johnson, President of King's (now Columbia) College, in New York city, on April 10, 1762, wrote to Archbishop Secker—

I beg leave, my Lord, to observe that it is a great pity when patents are granted, as they often are, for large tracts of land no provision is made for religion and schools. I wish, therefore, instructions were given to our governors never to grant patents for townships or villages or large manors without requiring the patentees to sequester a competent portion for the support of religion and schools.

Early in 1784 Georgia, in an act relative to the survey of lands in the western part of the State, uses this language :

And whereas the encouragement of religion and learning is an object of great importance to any community, and must tend to the prosperity, happiness, and advantage of the same,

Be it therefore enacted by the authority aforesaid, That the county surveyors, immediately after the passage of this act, shall proceed to lay out in each county twenty thousand acres of land of the first quality, in separate tracts of five thousand acres each, for the endowment of a collegiate seminary of learning.

The next year an act establishing a university was passed, a trustee of which was William Houstoun, a member of the Congress of the United States from that State, and one of the committee, as will be seen,

that reported a bill with the provision setting apart a certain portion of land in each township of the western territory for school purposes.

On the 17th of May, 1784, Mr. Jefferson, as Chairman of a committee for that purpose, presented to the Congress of the Confederation an ordinance respecting the disposition of public lands. This draft contained no reference to schools or education. On the 4th of March, 1785, another bill for the sale of western lands was introduced, by whom not stated, and on the 16th was recommitted by Congress to a committee of twelve.*

This committee on the fourteenth of April reported "An ordinance for ascertaining the mode of disposing of lands in the western territory," which contained the following paragraph :

There shall be reserved the central section of every township for the maintenance of public schools, and the section immediately adjoining the same to the northward for the support of religion. The profits arising therefrom in both instances to be applied forever according to the will of the majority of the male residents of full age within the same.

On the twenty-third of the same month, Mr. Pinckney, of South Carolina, seconded by Mr. Grayson, of Virginia, moved to strike out "for the support of religion," and insert "for religious and charitable uses." Mr. Ellery, of Rhode Island, seconded by Mr. Smith, of New York, moved to amend the amendment by striking out the words "religious and." On the question, Shall the words moved to be struck out stand ?

* The committee were Pierce Long, of New Hampshire, Rufus King, of Massachusetts, David Howell, of Rhode Island, Wm. S. Johnson, of Connecticut, R. R. Livingston, of New York, Charles Stewart, of New Jersey, Joseph Gardner, of Pennsylvania, John Henry, of Maryland, Wm. Grayson, of Virginia, Hugh Williamson, of North Carolina, John Bull, of South Carolina, and Wm. Houstoun, of Georgia.

Rufus King graduated at Harvard, in 1777.

David Howell, born in New Jersey, graduated at Princeton, in 1766, and was at one time Professor of Mathematics in Brown University.

Wm. S. Johnson, son of Dr. Samuel Johnson, graduated at Yale, 1744, a fellow of the Royal Society, and received the degree of LL.D. from Oxford, and at a later period President of Columbia College, New York city.

John Henry graduated at Princeton, in 1769.

Hugh Williamson graduated at College of Philadelphia, now University of Pennsylvania, in 1757, and had been Professor of Mathematics therein.

R. R. Livingston graduated at King's (now Columbia) College, New York city, in 1765, and in after life encouraged Fulton in propelling boats by steam, and was President of the Academy of Fine Arts.

The vote was as follows :*

States voting Aye.

New Hampshire.... Mr. Foster.
New Hampshire.... Mr. Long.
Massachusetts..... Mr. Holton.
Massachusetts..... Mr. King.
Connecticut..... Mr. Johnson.
Pennsylvania..... Mr. Gardner.
Pennsylvania..... Mr. Henry.
Delaware..... Mr. Vining.
Delaware..... Mr. Bedford.
Virginia..... Mr. Monroe.
Virginia..... Mr. Lee.
Virginia..... Mr. Grayson.
South Carolina..... Mr. Pinckney.
Georgia..... Mr. Houstoun.

States voting No.

Rhode Island... Mr. Ellery.
Rhode Island... Mr. Howell.
Maryland..... Mr. McHenry.
Maryland..... Mr. Henry.
Maryland..... Mr. Hindman (aye.)

States divided.

New York..... Mr. Smith (no.)
New York..... Mr. Haring (aye.)
North Carolina... Mr. Williamson (aye.)
North Carolina... Mr. Sitgreaves (no.)

So the question was lost and the words were stricken out.

Mr. Ellery, of Rhode Island, seconded by Mr. Smith, of New York, now moved to strike out all that which related to setting apart a section for the support of religion. On the question, Shall the words, "and the section immediately adjoining the same to the northward, for the support of religion," stand ?

The vote was as follows :

States voting Aye.

New Hampshire.... Mr. Foster.
New Hampshire.... Mr. Long.
Massachusetts..... Mr. Holton.
Massachusetts..... Mr. King.
Connecticut..... Mr. Johnson.
Pennsylvania..... Mr. Gardner.
Pennsylvania..... Mr. W. Henry.
Delaware..... Mr. Vining.
Delaware..... Mr. Bedford.
Virginia..... Mr. Monroe.
Virginia..... Mr. Lee.
Virginia..... Mr. Grayson.
South Carolina..... Mr. Pinckney.
Georgia..... Mr. Houstoun.

States voting No.

Rhode Island... Mr. Ellery.
Rhode Island... Mr. Howell.
Maryland..... Mr. McHenry.
Maryland..... Mr. J. Henry.
Maryland..... Mr. Hindman (aye.)

States divided.

New York..... Mr. Smith (no.)
New York..... Mr. Haring (aye.)
North Carolina... Mr. Williamson (aye.)
North Carolina... Mr. Sitgreaves (no.)

So the question was lost and the words were stricken out.

A motion was then made by Mr. Johnson, of Connecticut, and seconded by Mr. King, of Massachusetts, further to amend the paragraph by inserting after the word "schools" the following: "and the section immediately adjoining the same to the northward, for charitable uses;" which amendment was lost.

* Congress, under the Articles of Confederation, voted by States. To adopt a measure the vote of seven States was required, and in certain cases nine. The vote of a State was not counted unless at least two members were present.

The vote was as follows :

States voting Aye.

New Hampshire.... Mr. Foster.
New Hampshire.... Mr. Long.
Massachusetts.... Mr. Holton.
Massachusetts.... Mr. King.
Connecticut..... Mr. Johnson.
Delaware..... Mr. Vining.
Delaware..... Mr. Bedford.
Virginia..... Mr. Monroe.
Virginia..... Mr. Lee.
Virginia..... Mr. Grayson.
South Carolina.... Mr. Pinckney.
Georgia..... Mr. Houstoun.

States voting No.

New York..... Mr. Smith.
New York..... Mr. Haring.
Maryland..... Mr. McHenry.
Maryland..... Mr. J. Henry.
Maryland..... Mr. Hindman (aye.)

States divided.

North Carolina.. Mr. Williamson (aye.)
North Carolina.. Mr. Sitgreaves (no.)
Rhode Island... Mr. Ellery (no.)
Rhode Island... Mr. Howell (aye.)
Pennsylvania... Mr. Gardner (aye.)
Pennsylvania... Mr. W. Henry (no.)

On May 20, 1785, the ordinance as finally amended was passed with the following provision for education :

There shall be reserved the lot No. 16 of every township for the maintenance of public schools.

The Ordinance of 1787 "for the government of the Territory north-west of the river Ohio" confirmed the provision of 1785, and declared that "religion, morality and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall be forever encouraged." A few days after the passage of the Ordinance, regulations were made for the sale of the western territory, and in these it was provided that lot No. 16 in each township should be given perpetually for schools, and that "lot No. 29 in each township, or fractional part of a township, to be given perpetually for the purposes of religion;" and, further, that "not more than two complete townships to be given perpetually for the purposes of a university."

The grant of lot No. 29 for the purposes of religion has only been made in two instances—in the case of the Ohio Company, and what is known as the Symmes Purchase. Ohio, and the other western States admitted into the Union during the first half of the present century, received the sixteenth section of every township for the use of schools, in addition to the grant of two townships for universities.

The Commissioner of the Land Office, in 1846, and the Secretary of the Treasury, (R. J. Walker,) in 1847, recommended an increased grant of lands for school purposes to the new States and Territories.

In the first session of the Thirtieth Congress, February 15, 1848, as the question was about being put on the passage of the bill admitting Wisconsin as a State of the Union, the Hon. John A. Rockwell, member of the House of Representatives from Connecticut, moved an amendment giving the thirty-sixth in addition to the sixteenth section in each

township for educational uses, which was rejected, fifty-eight voting in the affirmative, and eighty in the negative.

In the acts establishing territorial governments for Oregon, in August, 1848, and for Minnesota, approved March 2, 1849, it was provided that sections numbered sixteen and thirty-six in each township should be reserved for the use of schools.

UNITED STATES LAND GRANTS FOR EDUCATION IN MINNESOTA.

As Minnesota was the first State in the valley of the Mississippi to receive twelve hundred and eighty acres in each township, to be employed in training her children for intelligent suffrage, the only safeguard for the perpetuity of a republican form of government, it is desirable to trace the steps she has taken in husbanding this precious gift from the nation, and the results of her supervision.

When, in 1857, a Convention assembled to form a constitution, preparatory to its admission into the Union, an interesting discussion arose as to the wisest course to be pursued in disposing and guarding the school lands.

The Committee on Education reported a provision that for the next ten years after the ratification of the constitution, the public school lands should "not be disposed of otherwise than by lease."

The Hon. A. E. Ames said : " I deem it proper to state what governed me as Chairman of the Committee having this subject under consideration, in inserting that clause. In my opinion, this gift of the General Government to the future State of Minnesota for the support of public schools is a sacred gift, which should be taken care of and husbanded in the best manner possible. Looking to the past, I saw how many of the western States having similar grants have disposed of them almost immediately after assuming the form of State governments, without realizing but a small portion of the amount which they might, with a little care, have realized as a perpetual fund for the support of schools hereafter. * * * * I have said that it is a sacred gift, intrusted to us for our children and our children's children ; if we husband it well, they will ' rise up and called us blessed.' If we squander it away, we shall receive only their curses." Delegates as intelligent and public-spirited as the committee, advocated a different policy and opposed the incorporation of the clause as to leasing lands, into the constitution. Hon. H. H. Sibley, who became the first Governor under the State organization, advocated what he thought would be " carrying out the great democratic idea of bringing down, as near as

possible, to the people, the disposal of these lands." He desired that "the people who live in a particular township should be able to say for themselves what disposition shall be made of the lands donated to them within their own limits." After considerable time had been passed in considering the report of the committee, a former Territorial Governor, Hon. Willis A. Gorman, moved to strike out the sentence that "the school lands for ten years should not be disposed of otherwise than by lease," and insert, "and not more than one-third of said lands may be sold in two years, one-third in five years, and one-third in ten years," which amendment was adopted as a compromise.

Article eight of the Constitution of Minnesota is as follows :

SEC. 1. The stability of a republican form of government depending mainly upon the intelligence of the people, it shall be the duty of the legislature to establish a general and uniform system of public schools.

SEC. 2. The proceeds of such lands as are or hereafter may be granted by the United States for the use of schools within each township in this State, shall remain a perpetual school fund to the State, and not more than one-third of said lands may be sold in two years, one-third in five years, and one-third in ten years ; but the lands of the greatest valuation shall be sold first: *Provided*, That no portion of said lands shall be sold otherwise than at public sale.

The principal of all funds arising from sales or other disposition of lands or other property granted to this State in each township for educational purposes, shall forever be preserved inviolate and undiminished ; and the income arising from the lease or sale of said school lands shall be distributed to the different townships throughout the State, in proportion to the number of scholars in each township between the ages of five and twenty-one years, and shall be faithfully applied to the specific objects of the original grants or appropriations.

SEC. 3. The legislature shall make such provisions, by taxation or otherwise, as with the income arising from the school fund, will secure a thorough and efficient system of public schools in each township of the State.

SEC. 4. The location of the University of Minnesota, as established by existing laws, is hereby confirmed, and said institution is hereby declared to be the University of the State of Minnesota.

All the rights, immunities, franchises, and endowments heretofore granted or conferred, are hereby perpetuated unto the said university, and all lands which may be granted hereafter by Congress, or other donations for said university purposes, shall vest in the institution referred to in this section."

An act of the Legislature, approved March 10, 1860, made the Chancellor of the State University *ex officio* Superintendent of Public Instruction, but failed to provide a salary for the performance of the duties of either office. Notwithstanding this inconvenience, the Chancellor immediately proceeded to attend to the interests of public schools. In his first report, dated January 14, 1861, under the head of school lands, he says :

During the month of June, 1860, the capital of Wisconsin was visited, and several days passed in interviews with the officers of the State in relation to their land system, its defects, and a better way of conducting the sale of lands. In order that a general idea might be obtained of the present value of our school lands, the following questions were addressed to the Superintendent of Schools in each town.

Is there timber on the school sections ?

To what extent?

Are the school lands swampy or well drained?

Are they watered by springs, creeks, or rivers?

Nature of the soil?

The present highest market price for similar lands?

The lowest price for similar lands?

Are there settlers on the school lands?

Were they there before the survey was made?

Have any depredations of timber or grass taken place?

The answers returned, show that the school lands are among the most valuable in the State, and legislation in relation thereto cannot be too careful and deliberate. The constitution imposes a healthful check upon those, who for purposes of private speculation, would hurry a sale of the entire school lands.

Governor Ramsey seconded the friends of education, in preserving the school lands from hasty sale. In his message to the Legislature of 1861, he says:

The Constitution provides that the proceeds of the school lands shall constitute a perpetual school fund for the State, and that the principal arising from the sales of such lands shall forever be preserved inviolate and undiminished.

It is the necessary logical implication of the constitutional provision, that the school lands should be administered with a view to the *permanent interests of the school fund*. It is only by adhering to this as a fundamental principle of legislation, by regarding the school lands not as a temporary source of relief from present burdens, but as a provision for the permanent interests of education, that we can rightly discharge the sacred obligations to posterity which this trust imposes upon us, or fitly respond to the elevated and paternal policy of the general government.

There has always been a disposition in the new States to hurry the school lands prematurely into market, partly originating in the desire of interested parties to obtain possession of these lands at low prices, and partly from the impatient eagerness of the pioneer to realize an immediate income therefrom, for the support of schools. There are, indeed, some plausible reasons why the pioneer should ask that the school lands should be used for his benefit. His are all the struggles and privations incident to the early colonization of the wilderness. By the sweat of his brow are laid the foundations of that wealth which is to yield the future revenues of the State. The expense and difficulty of maintaining schools in our present sparse and poor settlements, it is speciously alleged, renders local taxation more burdensome and legislative aid more welcome now than at any subsequent period.

It would, perhaps, be difficult to prove that the hardships and poverty of the first settlers in a new State are of such a peculiar character as to constitute a special claim to enjoy the benefit of the school grant to the prejudice of posterity. And it will not be overlooked, as against a pretension so greedy in its motive and so subversive in its consequences of the welfare of the State, that if the first settler endures some privations, he also enjoys great advantages which are denied to his successors. If he turns the first furrow, he also reaps the richest harvest. He does not accept the rugged lot of the pioneer as a personal sacrifice for the good of the State from which he therefore claims a special bounty, but from a shrewd calculation of its prospective benefits to himself. The rapid rise in the value of lands which attends the first stages of the growth of new settlements, turns principally to the advantage of the first settler, who has had the choice of the best locations; and that which he is so apt to claim as the tardy fruit of his own toil, more often results, without his agency, from the increase of population and capital around him. With what justice then can the incoming thousands of men who shall complete the social superstructure about him, and swell the sources of his prosperity, be deprived of the benefits of the enhanced value which they will give the school lands?

Nor has this policy, which would impoverish the future for the benefit of the present, any support in the sentiment of paternal solicitude. Our children we

may be sure would be anything but grateful for the benefits of an education procured at the selfish sacrifice of the noble heritage of which Providence has made us the trustees for their benefit, and the benefit of all those that come after them, and will scarcely build monuments to the memory of those men who, to enjoy an immunity from temporary taxation, entailed a treble burden on the education of their posterity for all time to come.

I am, however, very far from urging that the school lands shall only be disposed of with a view solely to realizing therefrom the largest ultimate fund. Such a principle would imply an indefinite postponement of the sale of the lands to the prejudice not only of education, but of all collateral public interests. It is to the general and permanent utility of the fund, and not its mere accumulation as a pecuniary investment, that you are to look, and it is for you to judge how far the public interests may be best subserved in the long run by encroaching on the school reserves for the means of education in the infancy of the State.

The constitution places no check upon legislative action in this matter, except in the provision that no more than one-third of the school lands shall be sold in two years, one-third in five years, and one-third in ten years; and that the most valuable shall be sold first—an obviously insufficient safeguard against improvident legislation.

Looking, then, at the ultimate fund to be derived from the school lands as a permanent resource of education for all time to come, it is for you to decide what this magnificent endowment is to be worth as an instrument of social development to the unborn millions of the future. The estimate now placed upon it will be the witness to posterity of the loftiness or the meanness of the views which actuate us. This estimate will be expressed first of all in the minimum price which you shall affix to the lands.

The question of a minimum, you will perceive, is in fact the cardinal point to be established.

There is one general principle in the adjustment of a minimum which, I doubt not, will meet with general concurrence. It should not be so high as to exclude the present generation from the benefits of the resulting revenue, nor so low as to impoverish the permanent fund. How, then, shall the permanent interests of the school fund be reconciled with the just claims of the present generation? The school lands represent not an actual, but a latent and prospective value, depending upon the general growth of the State for its development. Lands that might be sold this year for half a million dollars, would probably be sold in ten years for three millions. The former sum at seven per cent. interest, would yield an annual revenue of \$35,000, the latter, of \$210,000. Will the benefits that will accrue to education during the interval between the lower and higher valuation compensate you and your children for a sacrifice of five-sixths of the prospective value of the lands? I think not. And surely, looking solely to the interests of the present generation of children, and regarding the period of fifteen years over which our laws assume that the education of youth extends, it would not be a wise economy to provide for the first five years at such an expense to the last ten.

But as the fixing of the minimum attainable in the present generation implies some sacrifice of prospective values, where shall the line be drawn? Such a line must, of course, be arbitrary, but I think we are not entirely without data for approximation to a standard which will reconcile the interests of the present and future on the common ground of the public weal.

It is proper to observe that the value of the school lands bears a distinct relation to the density of population. Lands rapidly rise in value under the pressure of immigration, from the first settlement up to the point of their general occupation, and up to this point the school reserves ought not to be sold. But after the lands become mostly occupied in a given township, experience warrants the assumption that the included reserves have reached a standard of value beyond which the yearly increase will commonly be slow; and it may then become a matter of public policy that they should be settled upon and improved, and enter into the taxable basis of the State, and thus contribute in another form more to the immediate revenue of the schools and other collateral public interests than if retained for an advanced price. It is also worth considering that the compactness of neighbor-

hood which would give a fair value to the school lands, is essential to an efficient and economical expenditure of the school revenues.

While, therefore, the permanent interest of the school fund, and its useful expenditure, seem to require that the lands should not be sold till their intrinsic value had become developed by the growth of population around them, public policy demands that they should not be retained to be an obstacle to neighborhood, or withheld from cultivation for speculative purposes, after all the lands around them are taken up.

These principles, it seems, should regulate the establishment of a minimum price for the school lands.

A density of between 25 or 30 persons to the square mile in any given township, would probably imply an average valuation of the included school lands of about eight dollars an acre. In our more thickly settled counties, some of the reserved sections have already attained this average. Beyond this, it is doubtful if the increase in value would compensate for the public loss occasioned by their exclusion from settlement.

It is possible, too, that by adopting, at least for the highest grade of lands, a minimum of \$8 per acre—the old standard in Michigan—a larger fund would be realized in ten or fifteen years than by the loose method of appraisal, with a minimum of \$1 25, the system established in Iowa and Wisconsin, under which their splendid grants have become the prey of speculators. If our State advances the next decade as rapidly in population as Iowa, it is scarcely doubtful that some 300,000 acres of school lands will have attained the average value of \$8 per acre, equal to \$2,400,000 in all. This is, indeed, greater than the fund derived from the school lands in a similar period in Iowa or Wisconsin, where the lands have been sold at very low rates. But two things should be borne in mind in relation to the results of sales in those States: First, that we have twice the amount of these lands in proportion to our area, and three or four times the aggregate amount; second, that under the appraisal method of those States the interests of the fund have been uniformly sacrificed to the interests of local combinations. While, therefore, they have managed to get rid of a large amount of lands in a short space of time—which has seemed to be the main object—they have realized only a small proportion of their true value to the State. The minimum of \$1 25, which the legislatures of those States adopted, shows at how low a rate they prized the national boon.

The results of their short-sighted policy ought to be a sufficient warning against the errors of their example. Considerably more than half of the school lands have been sold in these States within the last ten years, and the fund realized in each case has been less than two million dollars. It would be mere repetition to say that, under a proper system, nearly the same results might have been obtained from a third of the land sold. In Michigan—where a minimum of \$8 originally obtained, afterwards reduced to \$5—out of only a million acres of school lands, one-third have been sold in twenty years, with a resulting fund of \$1,613,434. It is worthy of remark, that over \$400,000 of this was produced by the sales of the first five years, at an average of \$7 per acre.

You will not understand me as attempting to fix a precise valuation for the school lands, but as simply indicating the principles upon which, in my view, the minimum should be adjusted. But while adhering to a high valuation, it will be desirable to facilitate sales by the most liberal conditions consistent with the security of the principal and the prompt payment of the interest. A quarter of the purchase money paid down, with interest on the remainder at seven per cent. for thirty or more years, would probably be considered a better bargain to the purchaser than a much lower price, accompanied with those higher rates of interest and restricted time usual in private conveyances.

In accordance with the suggestions of the Governor, a State Land Office was established, the minimum price of school lands was fixed at five dollars per acre, and sales were required to be in the counties where the lands were situated. The present terms of payment on

school lands are, "for pine timber lands the whole amount; for other timber lands, which are chiefly valuable for the timber thereon, seventy-five per cent., to be paid at the time of sale, and all other lands fifteen per cent., to be paid at the time of sale, and the balance of the purchase-money at any time thereafter, from time to time, within twenty years, at the option of the purchaser, with interest annually in advance, at the rate of seven per cent. per annum on the unpaid balance, payable on the first day of June, or within six days thereafter, in each and every year." The purchase-money received "may be invested in Minnesota bonds (railroad bonds always excepted) or in United States bonds bearing not less than six per cent. interest."

The first sales of school lands occurred in the autumn of 1862, at a most unpropitious period, many able-bodied citizens having volunteered as soldiers in defence of the nation's honor, and hundreds having abandoned their farms in the frontier counties to escape the tomahawk and scalping-knife of the savage Sioux, while those who expected to settle in the State halted in regions supposed to be more secure. The results of the sales in the face of all these discouragements surprised the most sanguine, and created a fresh interest in popular education. More than thirty-eight thousand acres were disposed of, at a little more than 6½ dollars per acre, as will be seen by examining the following

Statement of annual sales of school lands.

Year.	No. of acres.	Price realized.	Average per acre.
1862	38,147.13	\$242,531 60	\$6 35.8
1863	52,293.91	309,777 46	5 92.4
1864	41,476.26	287,264 74	6 92.3
1865	24,211.77	144,915 05	5 96.5
1866	54,640.50	340,290 18	6 22.8
Total.....	210,722.87	1,324,779 03	6.28.4

Acres of school land unsold June 1, 1867, 2,775,898.

The total permanent school fund of the State, arising from the land grant, on November 30, 1866, was \$1,333,161 60.

The current school fund distributed in 1866 amounted to \$78,519 60, and the number of persons between five and twenty-one, 87,244, making an apportionment of ninety cents for each person.

The interest on school fund for the year 1867, according to estimate of the Hon. Mark H. Dunnell, State Superintendent of Public Instruction, will amount to \$117,435.

LAND GRANT FOR TERRITORIAL UNIVERSITY.

In February, 1851, the Territorial legislature memorialized for a grant of lands for a Territorial University. On the 19th of February of the same year it was enacted by Congress, says a report of the Regents—

"That the Secretary of the Interior be, and he hereby is, authorized and directed to set apart and reserve from sale out of the public lands within the Territory of Minnesota, to which the Indian title has been or may be extinguished, and not otherwise appropriated, a quantity of land not exceeding two entire townships, for the use and support of a *University* in said *Territory*, and for no other use and purpose whatever, to be located in legal subdivisions of not less than one entire section."

Shortly after this congressional enactment the Regents of the Territorial University organized, obtained a site, erected a building thereon, and commenced instruction therein—the first instance on record of a Territorial University going into operation at so early a period in the history of a Territory.

The Regents also, with the approbation of the Secretary of the Interior, proceeded to select a large portion of the lands granted for the Territorial institution. Subsequently they erected a costly edifice and mortgaged it, by virtue of a power granted by the Territorial Legislature of 1856, for \$15,000, to secure the payment of certain bonds, and by another act passed in 1858, on the eighth day of March, before the admission of Minnesota into the Union, mortgaged lands that had been selected by the Regents, to secure the payment of a further sum of \$40,000 borrowed by the Regents for the Territorial institution.

The whole number of acres obtained by act of 1851 is 46,080, of which there has been sold 10,750 for the sum of \$52,412. Acres unsold of the Territorial grant are 35,530.

STATE UNIVERSITY LAND GRANT.

Governor Marshall, in his last message to the Legislature, alludes to a claim of the State for a land grant for a State University not yet perfected. This claim was first made by the Regents to the Governor, April 5, 1860, in this language :

Heretofore Congress has made grants to Territories not having organized any Universities, and the lands being free from all prospective incumbrances, the Enabling Acts of Michigan, Wisconsin, and Iowa have used the following similar phraseology :

"Seventy-two sections of land set apart and reserved for the use and support of a university, by an act of Congress approved on — day of —, are hereby granted and conveyed to the State, to be appropriated solely to the use and support of such university in such manner as the legislature may prescribe."

The condition of Minnesota being different, so far as a territorial university was concerned, we expect and find different language in the enabling act. There is no reference, as in acts alluded to, to previous reserves, but it is prospective. It says, if certain provisions are accepted :

"That seventy-two sections of land shall be set apart and reserved for the use and support of a *State university* to be selected by the *governor of said State*, subject to the approval of the Commissioner of the General Land Office."

Although a territorial university had been in existence for years, and the regents had selected lands, there is no reference thereto, but the language prescribes selections for a *future State university*.

Certainly it was not the intention of Congress to turn over the debts and prospectively encumbered lands of an old and badly managed territorial institution, but to give the State that was to be, a grant for a State university, free from all connections with territorial organizations.

Will you, therefore, take the steps indicated in the enabling act, and appoint, at an early day, some one to select two townships of land for the State university, incorporated by the last legislature?

AGRICULTURAL COLLEGE LAND GRANT.

Under "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts," approved July 2, 1862, Minnesota is entitled to 120,000 acres, of which none has been sold.

THE FIVE HUNDRED THOUSAND ACRES DUE THE STATE.

The five hundred thousand acres due the State by the provisions of an act of Congress entitled "An act to appropriate the proceeds of the sales of the public lands," etc., approved the fourth day of September, one thousand eight hundred and forty-one, which, by provisions of the Constitutions of Wisconsin, Iowa, Oregon, Kansas, California, and Nevada, are appropriated to educational purposes, do not appear as yet to have been set apart by Minnesota.

IV. SIR MATTHEW HALE.

PLAN OF EDUCATION FOR HIS GRANDCHILDREN.

Written in 1678.

IN a "*Letter of Advice to his Grandchildren*," written when he was "threescore and four years," and published after his death, Sir Matthew Hale—one of the most resplendent names in the annals of jurisprudence, for mental ability, general learning, purity of life, and impartiality as judge—gives the following plan for their education, in which he differs "upon great reason and observation" "from the ordinary method of tutors," not only in his day, but for two centuries afterwards in England:—

PLAN OF EDUCATION FOR BOYS BETWEEN THE AGES OF EIGHT AND TWENTY

As to you, my grandsons, you must know, that till you come to be about eighteen or twenty years old, you are but in preparation to a settled estate of life; as there is no certain conjecture to be made before that age what you will be fit for, so till that age you are under the hammer and the file, to fit, dispose, and prepare you for your future condition of life, if God be pleased to lend it you; and about that time it will probably appear, both what you will be fit for, and whether you are like to make a prosperous voyage in the world or not.

1. Until you come to eight years old, I expect no more of you than to be good English scholars, to read perfectly and distinctly any part of the Bible, or any other English book, and to carry yourselves respectfully and dutifully to those that are set over you.

2. About eight years old, you are to be put or sent to a grammar school, where I expect you should make a good progress in the Latin tongue, in oratory and poetry; but above all to be good proficient in the Latin tongue, that you may be able to read, understand and construe any Latin author, and to make true and handsome Latin; and though I would have you learn somewhat of Greek, yet the Latin tongue is that which I most value, because almost all learning is now under that language. And the time for your abode at the grammar school is till you are about sixteen years old.

3. After that age, I shall either remove you to some university, or to some tutor that may instruct you in university learning, thus to be educated till you are about twenty years old; and herein I shall alter the ordinary method of tutors, upon great reason and observation.

I therefore will have you employed from sixteen to seventeen in reading some Latin authors to keep your Latin tongue; but principally and chiefly in arithmetic and geometry, and geodesy or measuring of heights, distances, and superficies and solids, for this will habituate and enlarge your understanding,

and will furnish you with a knowledge which will be both delightful and useful all the days of your life; and will give you a pleasant and innocent diversion and entertainment when you are weary and tired with any other business.

From seventeen years old till nineteen or twenty, you may principally intend logic, natural philosophy, and metaphysics, according to the ordinary discipline of the university; but after you have read some systems or late topical or philosophical tracts that may give you some taste of the nature of those sciences, I shall advise your tutor to exercise you in Aristotle, for there is more sound learning of this kind to be found in him, touching these sciences, than in a cart-load of modern authors; only tutors scarce take the pains to understand him themselves, much less to instruct their scholars and pupils in them, insomuch, that there are few that have read his books.

And under the title of philosophy, I do not only intend his eight books of physics, but his books de Natura et Generatione Animalium, his books de Incestu Animalium, de Anima, de Meteoris, de Somno et Vigilia, de Morte, de Plantis, de Mundo, and his Mechanics, if you join thereunto Archimedes'.

These are part of real philosophy, and excellently handled by him, and have more of use and improvement of the mind than other notional speculations in logic or philosophy delivered by others; and the rather, because bare speculations and notions have little experience and external observation to confirm them, and they rarely fix the minds, especially of young men. But that part of philosophy that is real, may be improved and confirmed by daily observation; and is more stable, and yet more certain and delightful, and goes along with a man all his life, whatever employment or profession he undertakes.

4. When you come to above twenty years old, you are come to the critical age of your life; you are in that state of choice that the ancients tell us was offered to Hercules; on the left hand, a way of pleasure, of luxury, of idleness, intemperance, wantonness, which though it first be tempting and flattering, yet it ends in dishonor, in shame, in infamy, in poverty; such a way as the wise man spoke of, "There is a way that is pleasant and delightful, but the end of that way is death;" and that which the same wise man speaks of, (Eccles. xi. 9,) "Rejoice, O young man, in thy youth, and let thy heart cheer thee in the days of thy youth, and walk in the ways of thine heart. But know for all these things, God will bring thee into judgment." Again, on the right hand, there is a way of honesty, and sobriety, of piety and the fear of God, of virtue and industry; and though this way may seem at first painful and rugged, yet it ends in peace and favor with God, and commonly in honor and reputation, in wealth and contentation even in this life. For although Almighty God hath reserved greater rewards for virtue and goodness than this life affords, yet he loves and delights to behold good and comely order among the children of men; and therefore a wise father will draw on his children to goodness, and learning, and obedience to him, with handsome rewards and encouragements, suitable to the age and disposition of his children. So the great Master and Father of the children of men, and of the great family of heaven and earth, doth commonly invite and draw men to ways of piety, virtue and goodness, by the encouragements of reputation, honor, esteem, wealth and other outward advantages, and thereby in great measure governs the children of men, and maintains that order that is necessary and convenient for the world of mankind.

And although this is neither the only nor chief reward of goodness and virtue yet till men are grown to that ripeness of understanding to look after re-

wards of a higher nature, namely, the happiness of the life to come, he is pleased most wisely to make use of these inferior encouragements and invitations, like so many little pulleys and cords, to draw men to the ways of virtue, piety and goodness, wherein, when they are once led and confirmed, they are established in higher and nobler expectations, namely, the love of God and the beauty of goodness and virtue. And on the right-hand way, there are not only propounded certain general virtues of sobriety, temperance and industry, but there are also certain particular walks of industry and virtue, and the exercise thereof in certain especial callings and employments, some more liberal and eminent, as divines, physicians, lawyers, &c. Some more laborious, yet generous enough as husbandry, the primitive and most innocent employment, is such as becomes noblemen and gentlemen. Some of other kinds, as merchants and handicrafts. And to all these employments, justly and industriously followed, Almighty God hath annexed a blessing: for they conduce to the good of mankind, and the maintenance of human societies, and the convenient support of persons and families.

And when you come to about this age, unless you are corrupted by idleness, evil company or debauchery, your minds will begin to settle, and your inclinations will begin to bend themselves towards some of these employments, and to a steady course of life. And although it may please God to order things so that you may not be put upon the necessity to take any of these professions upon you for your subsistence, because I may leave you a competent provision otherways, yet assure yourselves a calling is so far from being a burthen or dishonor to any of you, that it will be a great advantage to you every way to be of some profession; and therefore I commend some of them to your choice, especially for such of you whose fortunes may not be so plentiful.

But if you should not fix to any of these more regular professions, as divinity, law, or physic, yet I would have you so far acquainted with them, as that you may be able to understand, and maintain, and hold fast, the religion in which you have by me been educated; and so much of the laws of the kingdom, as may instruct you how to defend the estate that shall be left you, and to order your lives conformable to those laws under which you live, and to give at least common advice to your neighbors in matters of ordinary or common concernment; and so much of physic, especially of anatomy, as may make you know your own frame, and maintain and preserve your health by good diet, and those ordinary helps, a good herbal or garden may afford.

• And although you should not addict yourselves professedly to any of these three callings, yet I would have you all acquainted with husbandry, planting and ordering of a country farm, which is the most innocent, and yet most necessary employment, and such as becomes the best gentleman in England; for it is a miserable thing to see a man master of an estate in lands, and yet not know how to manage it, but must either be at the mercy of tenants or servants, or otherwise he knows not how to live, being utterly a stranger to husbandry; and therefore must be beholden to a tenant or a servant for his subsistence, who many times knowing their own advantage, by the ignorance, carelessness or idleness of a master or landlord, set the dice upon him, and use him as they please. I have always observed, a country gentleman that hath a competent estate of lands in his hands, and lives upon it, stocks it himself, and understands it, and manages it in his own hands, lives more plentifully, breeds up his children more handsomely, and in a way of industry, is better loved in his country, and doth

more good in it, than he that hath twice the revenue and lives upon his rents, or it may be in the city, whereby both himself, and family, and children, learn a life of idleness and expense, and many times of debauchery. And therefore if you can not settle your minds to any other profession, yet I would have you be acquainted with the course of husbandry, and manage at least some considerable part of your estate in your own hands. And this you may do without any disparagement, for the life of a husbandman is not unseemly for any of the children of Adam or Noah, who began it; and although that employment requires attendance and industry, as well as knowledge and experience, yet it will afford a man competent time for such other studies and employments as may become a scholar or a gentleman, a good patriot or justice in his country.

Though all callings and employments carry with them a gratefulness and contenting variety much more than idleness and intemperance, or debauchery, yet in whatsoever calling you are settled, though that calling must be your principal business, and such as you must principally apply yourselves unto, yet I thought it always necessary to have some innocent diversions for leisure times; because it takes off the tediousness of business, and prevents a worse mispending of the time. I therefore commend to those gentlemen, of what profession soever, that they spend their spare and leisure hours in reading of history or mathematics, in experimental philosophy, in searching out the kinds and natures of trees and plants, herbs, flowers, and other vegetables; nay, in observing of insects, in mathematical observations, in measuring land; nay, in the more cleanly exercise of smithery, watch-making, carpentry, joinery works of all sorts. These and the like innocent diversions give these advantages:—

1. They improve a man's knowledge and understanding;
2. They render him fit for many employments of use;
3. They take off the tediousness of one employment;
4. They prevent diversions of worse kinds, as going to taverns, or games, and the like;
5. They rob no time from your constant calling, but only spend with usefulness and delight that time that can be well spared.

V. CONSTITUTIONAL PROVISION RESPECTING EDUCATION.

DATE AND ABSTRACT OF EACH CONSTITUTION.

State.	Date.		Abstract of present constitutional provision.	Page.
	First constitution.	Education recognized.		
Massachusetts...	1780	1780	Cambridge University; duty to cherish literature, arts, science.....	83
Connecticut.....	1818	1818	Yale College; interest of school fund for equal benefit of all.....	88
New Hampshire..	1784	1784	Duty to promote literature, arts, and science.....	90
Vermont.....	1777	1793	Town and county grammar schools....	90
Maine.....	1820	1820	Towns at own expense to support schools; colleges encouraged.....	91
✓ Rhode Island....	1842	1842	Schools to be promoted; school fund not to be borrowed.....	91
New York.....	1777	1822	Common school fund; literature fund; \$25,000 of deposit fund annually appropriated.....	92
✓ New Jersey.....	1776	1844	School fund not to be borrowed; income for equal benefit of all.....	92
Pennsylvania...	1776	1790	Legislature to establish schools and promote arts and science.....	93
Delaware.....	1776	1831	Legislature to establish schools and promote arts and science.....	94
✓ Maryland.....	1776	1864	Superintendent; board of education; school fund.....	97
✓ Virginia.....	1776	1851	Capitation tax on white males.....	94
North Carolina...	1776	1776	Schools at low prices; universities.....	98
South Carolina...	1776	none.	.....	99
Georgia.....	1777	1798	Legislature to provide education for the people and endow university.....	99
✓ Kentucky.....	1790	1850	Superintendent; each county to have proportion of school fund.....	100
✓ Tennessee.....	1796	1835	Principal of school fund inviolate; commissioners.....	100
Ohio.....	1802	1802	Schools to be provided by interest of fund and taxation.....	101
Louisiana.....	1812	1845	Superintendent; free public schools.. university of New Orleans.....	102
Indiana.....	1816	1816	Superintendent; schools equally open to all; school fund.....	104
Mississippi.....	1817	1817	Schools to be encouraged.....	106
Illinois.....	1818	none.	.....	107

State.	Date.		Abstract of present constitutional provision.	Page.
	First constitution.	Education recognized.		
Alabama.....	1819	1819	Schools to be encouraged; university ..	107
Missouri	1820	1820	Superintendent; board of education; separate colored schools; university and school fund; no township receives money from school fund unless a school has been taught three months; new voters after 1836 to read and write....	
Arkansas	1836	1836	Schools to be encouraged.....	108
Michigan	1837	1837	Superintendent; board of education; public schools kept at least three months annually; normal, agricultural, university, and benevolent schools.	110
Florida	1845	1845	School fund to be kept inviolate.....	110
Texas	1845	1845	Superintendent; board of education; school and university fund; tax levied on colored persons to be used for colored schools.....	112
Iowa	1846	1846	Board of education; school funds and school lands.....	113
Wisconsin	1848	1848	Superintendent; school fund; school libraries; towns to raise by taxation at least one half the sum annually received from school fund.....	115
California.....	1849	1849	Superintendent; school and university funds; public schools to be kept three months each year.....	117
Minnesota	1858	1858	School fund and lands; university....	119
Oregon	1859	1859	Superintendent; school land commissioners; university.....	119
Kansas	1859	1859	Superintendent; common, normal, agricultural, and university schools; school lands to be sold by vote of people.....	121
West Virginia...	1862	1863	Superintendent; school fund	122
Nevada	1864	1864	Superintendent; school fund; university; tax on property for schools.....	123
Nebraska	1867	1867	School lands not to be sold for less than \$5 per acre.....	124

CONSTITUTIONAL PROVISION RESPECTING EDUCATION.

The past and present constitutional provisions of the several States of the Union relative to education exhibit the growth of the national sentiment in favor of, and the present strong attachment to, the public school system. In the early reconstruction of political organizations, rendered imperative by a separation from Great Britain, only a few States recognized in their organic law the necessity of providing for the diffusion of intelligence among the people, and this recognition is expressed in general terms. But within the last half century the constitutions of the States, admitted from time to time in the Union, have become more and more emphatic in the declaration, that it is the wisest economy and the highest duty to provide for an efficient and uniform system of public schools.

The New England States having incorporated a public school system with their earliest organizations, in emerging from their colonial condition, had no occasion to provide specially for it in their first State constitutions.

MASSACHUSETTS.

First settlement, 1620. Area 7,800 square miles.

POPULATION.			
1790.....	378,717	1830.....	610,840
1800.....	423,245	1840.....	737,699
1810.....	472,040	1850.....	994,514
1820.....	523,827	1860.....	1,231,066

In 1636, six years after the first settlement of Boston, the General Court of the colony of Massachusetts Bay, which met in Boston on the 8th of September, passed an act appropriating £400 toward the establishment of a college. The sum thus appropriated was more than the whole tax levied on the colony at that time in a single year, and the population scattered through ten or twelve villages did not exceed five thousand persons; but among them were eminent graduates of the University of Cambridge, in England, and all were here for purposes of permanent settlement. In 1638 John Haryard left by will the sum of £779 in money, and a library of over three hundred books. In 1640, the General Court granted to the college the income of the Charlestown ferry; and in 1642, the Governor, with the magistrates and teachers and

elders were empowered to establish statutes and constitutions for the infant institution; and in 1650 a charter was granted, which was protected by an article in the constitution of 1780 and still remains the fundamental law of the oldest literary institution in this country.

In 1642 the attention of the General Court was turned to the subject of family instruction in the following enactment:

Forasmuch as the good education of children is of singular behoof and benefit to any commonwealth; and whereas many parents and masters are too indulgent and negligent of their duty in this kind:

It is therefore ordered by this Court and the authority thereof, That the selectmen of every town, in the several precincts and quarters where they dwell, shall have a vigilant eye over their brethren and neighbors, to see, first, that none of them shall suffer so much barbarism in any of their families, as not to endeavor to teach, by themselves or others, their children and apprentices so much learning as may enable them perfectly to read the English tongue, and knowledge of the capital laws, upon penalty of twenty shillings for each neglect therein; also, that all masters of families do, once a week, at least, catechise their children and servants in the grounds and principles of religion, and if any be unable to do so much, that then, at the least, they procure such children or apprentices to learn some short orthodox catechism, without book, that they may be able to answer to the questions that shall be propounded to them out of such catechisms by their parents or masters, or any of the selectmen, where they shall call them to a trial of what they have learned in this kind; and further, that all parents and masters do breed and bring up their children and apprentices in some honest lawful calling, labor, or employment, either in husbandry or some other trade profitable for themselves and the commonwealth, if they will not nor cannot train them up in learning to fit them for higher employments; and if any of the selectmen, after admonition by them given to such masters of families, shall find them still negligent of their duty in the particulars aforementioned, whereby children and servants become rude, stubborn, and unruly, the said selectmen, with the help of two magistrates, shall take such children or apprentices from them, and place them with some masters for years, boys till they come to twenty-one, and girls eighteen years of age complete, which will more strictly look unto and force them to submit unto government, according to the rules of this order, if by fair means and former instructions they will not be drawn unto it.

In the same year the following brief School Code was enacted:

It being one chief project of that old deluder, Satan, to keep men from the knowledge of the Scriptures, as in former times, keeping them in an unknown tongue, so in these latter times, by persuading from the use of tongues, so that at least the true sense and meaning of the original might be clouded and corrupted with false glosses of deceivers; and to the end that learning may not be buried in the grave of our forefathers, in church and commonwealth, the Lord assisting our endeavors:

It is therefore ordered by this Court and authority thereof, That every township within this jurisdiction, after the Lord hath increased them to the number of fifth householders, shall then forthwith appoint one within their town to teach all such children as shall resort to him, to write and read, whose wages shall be paid, either by the parents or masters of such children, or by the inhabitants in general, by way of supply, as the major part of those who order the prudentials of the town shall appoint; provided that those who send their children be not oppressed by paying much more than they can have them taught for in other towns.

And it is further ordered, That where any town shall increase to the number of one hundred families or householders, they shall set up a grammar school, the masters thereof being able to instruct youths so far as they may be fitted for the university, and if any other town neglect the performance hereof above one year, then every such town shall pay five pounds per annum to the next such school, till they shall perform this order.

With various modifications as to details, but with the same objects

steadily in view, viz., the exclusion of "barbarism" from every family by preventing its having even one untaught and idle child or apprentice, the maintenance of an elementary school in every neighborhood where there were children enough to constitute a school, and of a Latin school in every large town, and of a college for higher culture for the whole colony, the colonial legislature, and the people in the several towns in Massachusetts, maintained an educational system, which, although not as early or as thorough as the school code of Saxony and Wirtemberg, has expanded with the growth of the community in population, wealth, and industrial development, and stimulated and shaped the legislation of other States in behalf of universal education.

The article on education in the constitution of 1780 was one of the first ever incorporated into the organic law of a State. Section 2, making imperative on legislators and magistrates to encourage the interests of literature and the sciences, and all seminaries of them, was framed by John Adams, and has been retained until this day without the slightest alteration.

The University at Cambridge, and Encouragement of Literature, etc.

SECTION I.—THE UNIVERSITY.

ART. 1. Whereas our wise and pious ancestors, so early as the year one thousand six hundred and thirty-six, laid the foundation of Harvard College, in which university many persons of great eminence have, by the blessing of God, been initiated into those arts and sciences which qualified them for public employments, both in church and state; and whereas the encouragement of the arts and sciences, and all good literature, tends to the honor of God, the advantage of the Christian religion, and the great benefit of this and the other United States of America; it is declared that the president and fellows of Harvard College, in their corporate capacity, and their successors in that capacity, their officers and servants, shall have, hold, use, exercise, and enjoy all the powers, authorities, rights, liberties, privileges, immunities, and franchises which they now have, or are entitled to have, hold, use, exercise, and enjoy; and the same are hereby ratified and confirmed unto them, the said president and fellows of Harvard College, and to their successors, and to their officers and servants, respectively, forever.

2. And whereas there have been, at sundry times, by divers persons, gifts, grants, devises of houses, lands, tenements, goods, chattels, legacies, and conveyances, heretofore made, either to Harvard College, in Cambridge, in New England, or to the president and fellows of Harvard College, or to the said college by some other description, under several charters successively—it is declared, that all the said gifts, grants, devises, legacies, and conveyances are hereby forever confirmed unto the president and fellows of Harvard College, and to their successors in the capacity aforesaid, according to the true intent and meaning of the donor or donors, grantor and grantors, deviser and devisors.

3. And whereas, by an act of the general court of the colony of Massachusetts Bay, passed in the year one thousand six hundred and forty-two, the governor and deputy governor for the time being, and all the magistrates of that jurisdiction, were, with the president and a number of the clergy in the said act described, constituted the overseers of Harvard College; and it being necessary in this new constitution of government to ascertain who shall be deemed successors to the said governor, deputy governor, and magistrates, it is declared that the governor, lieutenant governor, council, and senate of this commonwealth are and shall be deemed their successors; who, with the president of Harvard College for the time

being, together with the ministers of the Congregational churches in the towns of Cambridge, Watertown, Charlestown, Boston, Roxbury, and Dorchester, mentioned in the said act, shall be, and hereby are, vested with all the powers and authority belonging or in any way appertaining to the overseers of Harvard College: *Provided*, That nothing herein shall be construed to prevent the legislature of this commonwealth from making such alterations in the government of the said university as shall be conducive to its advantage, and the interest of the republic of letters, in as full a manner as might have been done by the legislature of the late province of Massachusetts Bay.

SECTION II.—THE ENCOURAGEMENT OF LITERATURE.

Wisdom and knowledge, as well as virtue, diffused generally among the body of the people, being necessary for the preservation of their rights and liberties, and as these depend on spreading the opportunities and advantages of education in the various parts of the country, and among the different orders of the people, it shall be the duty of the legislatures and magistrates, in all future periods of this commonwealth, to cherish the interest of literature and the sciences and all seminaries of them, especially the university at Cambridge, public schools, and grammar schools in the towns; to encourage private societies and public institutions, by rewards and immunities for the promotion of agriculture, arts, sciences, commerce, trades, manufactures, and a natural history of the country; to countenance and inculcate the principles of humanity and general benevolence, public and private charity, industry and frugality, honesty and punctuality in all their dealings; sincerity, good humor, and all social affections and generous sentiments among the people.

The history of the influences that led to the introduction of section second of this article was given by Mr. Adams in 1809. (Works iv, p. 259.)

"In travelling from Boston to Philadelphia in 1774-5-6-7, I had several times amused myself at Norwalk, Connecticut, with the very curious collection of birds and insects of American production made by Mr. Arnold, a collection which he afterwards sold to Governor Tryon, who sold it to Sir Ashton Lever, in whose apartments in London I afterwards viewed it again. This collection was so singular a thing that it made a deep impression on me, and I could not but consider it a reproach to my country that so little was known even to herself of her natural history.

"When I was in Europe in the years 1778 and 1779, in the commission to the King of France with Dr. Franklin and Mr. Arthur Lee, I had opportunity to see the King's collection and many others, which increased my wishes that nature might be examined and studied in my own country as it was in others.

"In France, among the academicians and other men of science and letters, I was frequently entertained with inquiries concerning the Philosophical Society at Philadelphia, and with eulogiums on the wisdom of that institution and encomiums on some publications of their transactions.

"These conversations suggested to me the idea of such an establishment in Boston, where I knew there was as much love of science, and as many gentlemen capable of pursuing it, as in any other city of its size.

"In 1779 I returned to Boston in the French frigate, *La Sensible*, with the Chevalier de la Luzerne and Mr. Marbois. The corporation of Harvard College gave a public dinner in honor of the French ambassador and his suite, and did me the honor of an invitation to dine with them.

"At the table, in the philosophy chamber, I chanced to sit next to Dr. Cooper. I entertained him during the whole of the time we were together with an account of Arnold's collections I had seen in Europe, the compliments I had heard in France upon the Philosophical Society at Philadelphia, and concluded with proposing that the future legislature of Massachusetts should institute an academy of arts and sciences.

"The doctor at first hesitated, thought it would be difficult to find members who would attend to it; but his principal objection was that it would injure Harvard College by setting up a rival to it that might draw the attention and affections of the people in some degree from it. To this I answered: first, that there were certainly men of learning enough that might compose a society sufficiently numerous; and, secondly, that instead of being a rival to the university, it would be an honor and advantage to it. That the president and principal professors would undoubtedly be always members of it, and the meetings might be ordered wholly or in part at the college, and in that room. The doctor at length appeared better satisfied, and I entreated him to propagate the idea and the plan as far and as soon as his discretion would justify. The Doctor accordingly did diffuse the project so judiciously and effectually that the first legislature under the constitution adopted and established it by law.*

"Afterwards, when attending the convention for framing the constitution, I mentioned the subject to several of the members, and when I was appointed by the sub-committee to make a draught of a project of a constitution to be laid before the convention, my mind and heart were so full of the subject I inserted chapter v, section 2.

"I was somewhat apprehensive that criticism and objection would be made to the section, and particularly that the 'natural history' and the 'good humor' would be stricken out, but the whole was received very kindly, and passed the convention unanimously without amendment."

* American Academy of Arts and Sciences, incorporated May 4, 1780.

The following article was ratified by the people of Massachusetts in 1837. as an amendment to the Constitution.

ART. XX. No person shall have the right to vote, or be eligible to office under the constitution of this Commonwealth, who shall not be able to read the constitution in the English language and write his name: *provided, however, that* the provisions of this amendment shall not apply to any person prevented by a physical disability from complying with its requisitions, nor to any person who now has the right to vote, nor to any persons who shall be sixty years of age or upwards at the time this amendment shall take effect.

CONNECTICUT.

Settled in 1633. Area, 4,674 square miles.

POPULATION.

1790.....	238, 141	1830.....	297, 675
1800.....	251, 002	1840.....	309, 978
1810.....	262, 042	1850.....	370, 792
1820.....	275, 202	1860.....	460, 147

In the towns of Hartford and New Haven, settled in 1636 and 1638, as well as in towns settled afterwards, the public school was one of the earliest subjects of municipal legislation in Hartford in 1638, and in New Haven in 1639, as much as the roads and bridges, the support of public worship, and protection against the Indians.

In the body of laws for the government of the commonwealth, known as the code of 1650, the provisions for the family instruction of children, and the maintenance of schools by towns, are identically the same as in Massachusetts, and remained on the statute book, with slight modifications to give them more efficiency, for two hundred years.

In the chapter respecting schools, it is commended to "every family," which is able and willing, "to give yearly but the fourth part of a bushel of corn, or something equivalent thereto, for the advancement of learning by the college at Cambridge;" which practice was continued until ten of the principal ministers, in 1700, brought each a number of books to found a college in Connecticut.

As early as 1701 the system of public instruction in Connecticut so far matured as to embrace the following particulars:

1. An obligation on every parent and guardian of children "not to suffer so much barbarism, in any of their families, as to have a single child or apprentice unable to read the holy word of God, and the good laws of the colony;" and also "to bring them up to some lawful calling or employment," under a penalty for each offence.

2. A tax of forty shillings on every thousand pounds of the lists of estates was collected in every town with annual State tax, and payable

proportionably to those towns only which should establish their schools according to law.

3. A common school in every town having over seventy families, kept for at least six months in a year.

4. A grammar school in each of the four head county towns, to fit youth for college.

5. A collegiate school, toward which the General Court made an annual appropriation of £120.

6. Provision for the religious instruction of the Indians.

The system, therefore, embraced every family and town, all classes of children and youth, and all the then recognized grades of schools. There were no select or sectarian schools to classify society at the roots; but all children were regarded with equal favor, and all brought under the assimilating influence of early associations and similar school privileges.

Here was the foundation laid not only for universal education, but for a practical and social equality which has never been surpassed in the history of any other community.

In 1795 the legislature, after several years of discussion, set the example of establishing a permanent and irreducible fund, the income of which should be applied to the support of common or public schools, by appropriating for this purpose a portion of the Territory of Ohio, now known as the Connecticut Reserve, because it was reserved by the State for its own use, when it ceded its claim to the whole national domain beyond, of the same width as its own territory.

The colonial charter formed the basis of government until 1818, when a State constitution was adopted, which still exists, article eight of which protects both the college and the school fund.

ARTICLE VIII.—OF EDUCATION.

SEC. 1. The charter of Yale College, as modified by agreement with the corporation thereof, in pursuance of an act of the general assembly, passed in May, 1792, is hereby confirmed.

2. The fund called the *school fund* shall remain a perpetual fund, the interest of which shall be inviolably appropriated to the support and encouragement of the public or common schools throughout the State, and for the equal benefit of all the people thereof. The value and amount of said fund shall, as soon as practicable, be ascertained in such manner as the general assembly may prescribe, published, and recorded in the comptroller's office; and no law shall ever be made authorizing said fund to be diverted to any other use than the encouragement and support of public or common schools among the several school societies, as justice and equity shall require.

In 1855 the following amendment to the Constitution was adopted:

Every person shall be able to read any article of the Constitution, or any section of the statutes of this State, before being admitted as an elector.

NEW HAMPSHIRE.

First settlement made in 1623. Area, 9,280 square miles.

POPULATION.

1790.....	141,899	1830.....	260,328
1800.....	183,762	1840.....	284,574
1810.....	214,360	1850.....	317,796
1820.....	244,161	1860.....	326,073

First constitution was adopted in 1784, in which there is the following provision relative to the encouragement of literature :

ENCOURAGEMENT OF LITERATURE, ETC.

Knowledge and learning, generally diffused through a community, being essential to the preservation of a free government ; and spreading the opportunities and advantages of education through the various parts of the country, being highly conducive to promote this end, it shall be the duty of the legislators and magistrates, in all future periods of this government, to cherish the interests of literature and the sciences, and all seminaries and public schools, to encourage private and public institutions, rewards and immunities for the promotion of agriculture, arts, sciences, commerce, trades, manufactures, and natural history of the country ; to countenance and inculcate the principles of humanity and general benevolence, public and private charity, industry and economy, honesty and punctuality, sincerity, sobriety, and all social affections and generous sentiments, among the people.

This article in substance appears to have been copied from the constitution of Massachusetts, the alterations being only verbal.

In the constitution of 1792, which still exists, it was inserted without change.

VERMONT.

Settled 1724-'31. Area, 9,056 square miles. Admitted as one of the United States of America in 1791.

POPULATION.

1790.....	85,416	1830.....	280,652
1800.....	162,101	1840.....	291,948
1810.....	217,713	1850.....	314,120
1820.....	235,764	1860.....	315,098

The first constitution was formed in 1777, and the second in 1793, which is still in force, article forty-one of which declares—

Laws for the encouragement of virtue and prevention of vice and immorality ought to be constantly kept in force, and duly executed ; and a competent number of schools ought to be maintained in each town, for the convenient instruction of youth, and one or more grammar schools be incorporated and properly supported in each county in this State. And all religious societies or bodies of men, that may be hereafter united or incorporated for the advancement of religion and learning, or for other charitable purposes, shall be encouraged and protected in the enjoyment of the privileges, immunities, and estates which they in justice ought to enjoy, under such regulations as the general assembly of this State shall direct.

MAINE.

Settled in 1624. Area, 31,766 square miles. Admitted into the Union in 1820.

POPULATION.

1790.....	96,540	1830.....	399,455
1800.....	151,719	1840.....	501,793
1810.....	228,705	1850.....	583,169
1820.....	298,335	1860.....	628,279

The constitution adopted in 1820 has an article relating to

LITERATURE.

A general diffusion of the advantages of education being essential to the preservation of the rights and liberties of the people, to promote this important object the legislature is authorized, and it shall be its duty, to require the several towns to make suitable provision, at their own expense, for the support and maintenance of public schools; and it shall further be their duty to encourage and suitably endow, from time to time, as the circumstances of the people may authorize, all academies, colleges, and seminaries of learning within the State: *Provided*, That no donation, grant, or endowment shall at any time be made by the legislature to any literary institution now established, or which may hereafter be established, unless at the time of making such endowment the legislature of the State shall have the right to grant any further powers to alter, limit, or restrain any of the powers vested in any such literary institution as shall be judged necessary to promote the best interests thereof.

RHODE ISLAND.

Settled in 1631. Area, 1,306 square miles.

POPULATION.

1790.....	69,110	1830.....	97,199
1800.....	69,122	1840.....	108,130
1810.....	77,031	1850.....	147,545
1820.....	83,059	1860.....	174,620

The colonial charter remained in force until 1842, when a constitution was adopted by the people.

The provision relative to education is as follows:

ARTICLE XII.—OF EDUCATION.

SEC. 1. The diffusion of knowledge as well as of virtue among the people being essential to the preservation of their rights and liberties, it shall be the duty of the General Assembly to promote public schools, and to adopt all means which they may deem necessary and proper to secure to the people the advantages and opportunities of education.

2. The money which now is, or which may hereafter be, appropriated by law for the establishment of a permanent fund for the support of public schools, shall be securely invested and remain a perpetual fund for that purpose.

3. All donations for the support of public schools, or for other purposes of education, which may be received by the General Assembly, shall be applied according to the terms prescribed by the donors.

4. The General Assembly shall make all necessary provisions by law for carrying this article into effect. They shall not divert said money or fund from the aforesaid uses, nor borrow, appropriate, nor use the same, or any part thereof, for any other purpose, under any pretence whatever.

NEW YORK.

Settled in 1609 by the Dutch. Area, 46,000 square miles.

POPULATION.

1790.....	340,120	1830.....	1,918,608
1800.....	586,756	1840.....	2,428,921
1810.....	959,049	1850.....	3,007,394
1820.....	1,372,812	1860.....	3,880,735

The first constitution was adopted in 1777, in which is no reference to schools; the second, in 1822, in which it was provided in article seventh, section five, that—

“The proceeds of all lands belonging to this State, except such parts thereof as may be reserved or appropriated to public use, or ceded to the United States, which shall hereafter be sold or disposed of, shall remain a perpetual fund, the interest of which shall be inviolably appropriated and applied to the support of common schools.”

The third constitution was adopted in 1846, and the provision therein for education is comprised in article ninth.

SEC. 1. The capital of the common school fund, the capital of the literature fund, and the capital of the United States deposit fund, shall be respectively preserved inviolate. The revenues of the said common school fund shall be applied to the support of common schools; the revenues of the said literature fund shall be applied to the support of academies, and the sum of twenty-five thousand dollars of the revenues of the United States deposit fund shall each year be appropriated to and made a part of the capital of the said common school fund.

NEW JERSEY

First settlement in 1627. Area, 8,320 square miles.

POPULATION.

1790.....	184,139	1830.....	320,823
1800.....	211,549	1840.....	373,306
1810.....	245,555	1850.....	489,555
1820.....	277,577	1860.....	672,035

The first constitution was adopted in 1776, and the second in 1844, in which is this provision for education :

SECTION VII.—ARTICLE 6.

The fund for the support of free schools, and all money, stock, and other property which may hereafter be appropriated for that purpose, or received into the treasury under the provision of any law heretofore passed to augment the said fund should be securely invested, and remain a perpetual fund; and the income hereof, except so much as it may be judged expedient to apply to an increase of

the capital, shall be annually appropriated to the support of public schools, for the equal benefit of all the people of the State; and it shall not be competent for the Legislature to borrow, appropriate, or use the said fund, or any part thereof, for any other purpose, under any pretence whatever.

PENNSYLVANIA.

Settled by the Swedes in 1631. Area, 46,000 square miles

POPULATION.

1790.....	434,373	1830.....	1,348,233
1800.....	602,361	1840.....	1,724,033
1810.....	810,091	1850.....	2,311,786
1820.....	1,049,058	1860.....	2,906,215

First constitution was adopted in 1776. The second, in 1790, in which the subject of education was recognized, contains two brief sections on the subject, under

ARTICLE VII.

SECTION 1. The legislature shall, as soon as conveniently may be, provide by law for the establishment of schools throughout the State, in such manner that the poor may be taught gratis.

SECTION 2. The arts and sciences shall be promoted in one or more seminaries of learning.

In the convention of 1838, Mr. Bedford, of Luzerne, offered an amendment to the provision of the constitution of 1790, so that it would read—

“The legislature shall continue to provide by law for the establishment of common schools throughout the State in such a manner that all persons residing therein may enjoy the benefits of education.”

The following remarks were made at the time of offering the resolution:

“I am aware that many gentlemen who occupy seats upon this floor deem such a constitutional provision unnecessary, because, as they assert, the legislature may at any time make suitable enactments upon the subject. But the law that is passed this year may be repealed the next; so that our school system, which is the basis of the intelligence of the people, must be liable to change with the political policy of our law makers, and thereby be liable to perpetual fluctuation and enactments, etc.”

At that time there was not the interest in popular education in Pennsylvania that now exists, and the amendment was not carried; and the constitution of 1838 on the subject of education has the same language as that of 1790.

DELAWARE.

Settled in 1627. Area, 2,120 square miles.

POPULATION.

1790	59,096	1830	76,748
1800	64,273	1840	78,085
1810	72,674	1850	91,532
1820	72,749	1860	112,216

In the first constitution, adopted 1776, there is no provision for education; but as amended in 1831, the Legislature is instructed "to provide by law" "for establishing schools, and promoting arts and sciences."

VIRGINIA.

Settled in 1607. Area, 38,352 square miles.

POPULATION.

Census.	White.	Free colored.	Slaves.	Total.
1790.....	442,115	12,766	293,427	748,308
1800.....	514,280	20,124	345,796	880,200
1810.....	551,534	30,570	392,518	974,622
1820.....	603,087	36,889	425,153	1,065,129
1830.....	694,300	47,348	469,757	1,211,405
1840.....	740,858	49,852	449,087	1,239,797
1850.....	894,800	54,332	472,529	1,421,661
1860.....	1,047,411	58,042	490,865	1,596,318

Previous to the Revolution, the public school system had not obtained root beyond the limits of the eastern States. The township and district school organizations of New England had, however, excited the admiration of Wythe, Jefferson, and other eminent Virginia statesmen.

Patrick Henry wrote to John Adams: "It shall be my incessant study so to form our portrait of government that a kindred with New England may be discerned in it; and if all your excellencies cannot be preserved, yet I hope to retain so much of the likeness that posterity shall pronounce us descended from the same stock." Richard Bland Lee, at a later period, on the floor of Congress, spoke of "the forefathers of New England, who have established the wisest institutions for the perpetuation of human liberty and human happiness the world has seen." * Debate on Madison's resolutions, Jan. 20, 1794.

Such views having been cordially entertained, it was not surprising that Jefferson, as one of those appointed by Virginia, after the Declara-

* Wansley's Excursion to the United States. 1794.

tion of Independence by the Colonies, to prepare a code of laws adapted to the altered condition of that commonwealth, should strive to introduce the New England system of common schools.

The year that the first constitution was formed, a committee was appointed to prepare a code of laws adapted to the altered condition of affairs.

In 1779 Wythe and Jefferson made a report, in which was a full chapter from the pen of Jefferson on public schools. The caption was—

A BILL for the more general diffusion of knowledge.

SECTION 1. Whereas it appeareth that however certain forms of government are better calculated than others to protect individuals in the free exercise of their natural rights, and are at the same time themselves better guarded against degeneracy, yet experience hath shown, that even under the best forms those intrusted with power have in time, and by slow operations, perverted it into tyranny; and it is believed that the most effectual means of preventing this would be to illuminate, as far as practicable, the minds of the people at large, and more especially to give them knowledge of those facts which history exhibiteth, that, possessed thereby of the experience of other ages and countries, they may be enabled to know ambition under all its shapes, and prompt to exert their natural powers to defeat its purposes; and whereas it is generally true that the people will be happiest whose laws are best, and are best administered, and that laws will be wisely formed and honestly administered in proportion as those who form and administer them are wise and honest: whence it becomes expedient for promoting the public happiness, that those persons whom nature hath endowed with genius and virtue should be rendered, by liberal education, worthy to receive, and able to guard the sacred deposit of the rights and liberties of their fellow-citizens, and that they should be called to the charge without regard to wealth, birth, or other accidental condition or circumstance. But the indigence of the greater number, disabling them from so educating at their own expense those of their children whom nature hath fitly formed and disposed to become useful instruments of the public, it is better that such should be sought for and educated at the common expense of all, than that the happiness of all should be confided to the weak or wicked.

The succeeding sections provided that each county should be divided in convenient districts for public schools. "At every one of these schools," in the language of the bill, "shall be taught reading, writing, common arithmetic; and the books which shall be used therein for instructing the children to read shall be such as will, at the same time, make them acquainted with Grecian, Roman, English, and American history."

It was also provided that over every ten of these schools an overseer should be appointed annually, by the aldermen, to select teachers, to visit the schools, to direct in the choice of reading books, and superintend the teachers.

The superintendents were to meet in convention, and establish at central points a certain number of grammar schools, in which were to be taught Latin, Greek, grammar, geography, and higher arithmetic.

The most needy and meritorious scholar from a grammar school district was to be educated at the expense of the State, and one scholar

was to be selected from the grammar schools to be educated gratuitously at college.

Five years after the bill in manuscript was presented, it was printed by order of the assembly of 1784.

Jefferson says: "One provision of the bill was that the expenses of the schools should be borne by the inhabitants of the county, every one in proportion to his general tax rate. This would throw on wealth the education of the poor."

In 1796 the assembly acted upon the bill, but inserted a provision leaving to each county court to declare when the act should go into operation within the limits of its jurisdiction, which, adds Jefferson, "completely defeated it. The justices being generally of the more wealthy class, were unwilling to incur the burden, and I believe it was not suffered to commence in a single county."

His interest in common schools never flagged, although his native State could not be aroused to its best interests, and in a letter to Hon. Joseph C. Cabell, dated November 28, 1820, he says:

"Surely Governor Clinton's display of the gigantic effort of New York towards the educating of her citizens will stimulate the pride, as well as the patriotism, of our legislature to look to the reputation and safety of our country, to rescue it from the degradation of becoming the Barbary of the Union, and of falling into the ranks of even our negroes. To that condition it is fast sinking. We shall be in the hands of the other States what our indigenous predecessors were when surrounded by the sciences and arts of Europe. The success of education before the Revolution placed her with the foremost of the sister colonies. What is her education now? Where is it? The little we have we import, like beggars, from other States, or import the beggars, to bestow on us their miserable crumbs."

The first constitution was adopted in 1776, second in 1830, third in 1851, and fourth in 1864.

In the constitution adopted in 1830 there is no reference to education, but in that of 1851 is the following provision:

A capitation tax, equal to the tax assessed on land of the value of two hundred dollars, shall be levied on every white male inhabitant who has attained the age of twenty-one years; and one equal moiety of the capitation tax upon white persons shall be applied to the purposes of education in primary and free schools; but nothing herein contained shall prevent exemptions of taxable polls in cases of bodily infirmity.

In the revision of 1864, this provision is retained in the twenty-second article.

MARYLAND.

Settled in 1634. Area, 9,356 square miles.

POPULATION.

Census.	White.	Free colored.	Slaves.	Total.
1790.....	208,649	8,043	103,036	319,728
1800.....	246,326	19,587	105,635	341,548
1810.....	235,117	33,927	111,502	380,546
1820.....	260,223	39,730	107,397	407,350
1830.....	291,108	52,938	102,994	447,040
1840.....	318,204	62,078	89,737	470,019
1850.....	417,943	74,723	90,368	583,034
1860.....	515,918	83,942	87,189	687,049

The first constitution was adopted in 1776; the second in 1851; and the third in 1864. The first provision on education is in that of 1864, and is as follows :

ARTICLE VIII — EDUCATION.

SECTION 1. The governor shall within thirty days after the ratification by the people of this constitution appoint, subject to the confirmation of the senate at its first session thereafter, a State superintendent of public instruction, who shall hold his office for five years, and until his successor shall have been appointed and shall have been qualified. He shall receive an annual salary of twenty-five hundred dollars, and such additional sum for travelling and incidental expenses as the general assembly may by law provide; shall report to the general assembly within thirty days after the commencement of its first session under this constitution, a uniform system of free public schools, and shall perform such other duties pertaining to his office as may from time to time be prescribed by law.

SECTION 2. There shall be a State board of education, consisting of the governor, the lieutenant governor, the speaker of the house of delegates, and the State superintendent of public instruction, which board shall perform such duties as the general assembly may direct.

SECTION 3. There shall be in each county such number of school commissioners as the State superintendent of public instruction shall deem necessary, who shall be appointed by the State board of education; shall hold office for four years, and shall perform such duties and receive such compensation as the general assembly or State superintendent may direct; the school commissioners of Baltimore city shall remain as at present constituted, and shall be appointed as at present, by the mayor and city council, subject to such alterations and amendments as may be made from time to time by the general assembly, or the said mayor and city council.

SECTION 4. The general assembly, at its first session after the adoption of this constitution, shall provide a uniform system of free public schools, by which a school shall be kept open and supported free of expense for tuition in each school district, for at least six months in each year; and in case of failure on the part of the general assembly to provide, the system reported to it by the State superintendent of public instruction shall become the system of free public schools of the State: *Provided*, That the report of the State superintendent shall be in conformity with the provisions of this constitution, and such system shall be subject to such alterations, conformable to this article, as the general assembly may from time to time enact.

SECTION 5. The general assembly shall levy at each regular session after the adoption of this constitution, an annual tax of not less than ten cents on each

hundred dollars of taxable property throughout the State, for the support of free public schools, which tax shall be collected at the same time and by the same agents as the general State levy; and shall be paid into the treasury of the State, and shall be distributed under such regulations as may be prescribed by law, among the counties and the city of Baltimore, in proportion to their respective population between the ages of five and twenty years: *Provided*, That the general assembly shall not levy any additional school tax upon particular counties, unless such county express by popular vote its desire for such tax; the city of Baltimore shall provide for its additional school tax as at present, or as may hereafter be provided by the general assembly, or by the mayor and city council of Baltimore.

SECTION 6. The general assembly shall further provide by law, at its first session after the adoption of this constitution, a fund for the support of the free public schools of the State, by the imposition of an annual tax of not less than five cents on each one hundred dollars of taxable property throughout the State, the proceeds of which tax shall be known as the public school fund, and shall be invested by the treasurer, together with its annual interest, until such time as said fund shall by its own increase and any addition which may be made to it from time to time, together with the present school fund, amount to six millions of dollars, when the tax of ten cents on the hundred dollars, authorized by the preceding section, may be discontinued in whole or in part as the general assembly may direct; the principal fund of six millions, hereby provided, shall remain forever inviolate as the free public school fund of the State, and the annual interest of said school fund shall be disbursed for educational purposes only, as may be prescribed by law.

In the constitution just formed and to be submitted to the people on the eighteenth of September for adoption or rejection, there is the following:

ARTICLE VIII.

EDUCATION.

SECTION 1. The General Assembly, at its first session after the adoption of this constitution, shall, by law, establish throughout the State a thorough and efficient system of Free Public Schools, and shall provide, by taxation or otherwise, for their maintenance.

SEC. 2. The system of Public Schools, as now constituted, shall remain in force until the end of the said first session of the General Assembly, and shall then expire, except so far as adopted or continued by the General Assembly.

SEC. 3. The school fund of the State shall be kept inviolate, and appropriated only to the purposes of education.

NORTH CAROLINA.

Settled in 1653. Area, 45,000 square miles.

POPULATION.

Census.	White.	Free colored.	Slaves.	Total.
1790.....	288,204	4,975	100,572	393,751
1800.....	337,764	7,043	133,296	478,103
1810.....	376,410	10,266	168,824	555,500
1820.....	419,200	14,612	205,217	638,829
1830.....	472,843	19,543	245,661	737,987
1840.....	484,870	22,732	245,817	753,419
1850.....	553,028	27,463	298,548	869,039
1860.....	631,000	30,463	331,059	992,622

In the constitution of 1776 it was declared in article forty-one that—

A school or schools shall be established by the legislature, for the convenient instruction of youth, with such salaries to the masters, paid by the public, as may enable them to instruct at low prices; and all useful learning shall be duly encouraged and promoted in one or more universities.

The same provision has been retained without amendment until the present time.

SOUTH CAROLINA.

Settled in 1670. Area, 24,800 square miles.

POPULATION.

Census.	White.	Free colored.	Slaves.	Total.
1790.....	140,178	1,801	107,094	249,073
1800.....	196,255	3,185	146,151	345,591
1810.....	214,196	4,554	196,365	415,105
1820.....	237,440	6,822	258,475	502,741
1830.....	257,863	7,921	315,401	581,185
1840.....	259,084	8,276	327,038	594,398
1850.....	274,563	8,960	384,984	668,507
1860.....	291,388	9,914	402,406	703,708

A constitution was formed in 1776, which was amended in 1778, 1790, and in 1865, but no provision was incorporated relative to education or the encouragement of learning.

GEORGIA.

Settled in 1733. Area, 58,000 square miles.

POPULATION.

Census.	White.	Free colored.	Slaves.	Total.
1790.....	52,886	398	29,264	82,548
1800.....	101,678	1,019	59,404	162,101
1810.....	145,414	1,801	105,218	258,433
1820.....	189,564	1,767	149,656	340,433
1830.....	294,806	2,484	217,531	576,823
1840.....	407,695	2,753	280,944	691,392
1850.....	521,572	2,931	381,682	906,185
1860.....	591,588	3,500	462,198	1,057,286

First constitution formed in 1777; the second in 1785; the third in 1798, which was amended in 1839.

The provision relative to seminaries of learning in that of 1798 was retained in the amended constitution of 1839. It is in these words:

13. The arts and sciences shall be promoted, in one or more seminaries of learning; and the legislature shall, as soon as conveniently may be, give such further donations and privileges to those already established, as may be necessary to secure the objects of their institution; and it shall be the duty of the general assembly, at their next session, to provide effectual measures for the improvement and permanent security of the funds and endowments of such institutions.

In the Constitution of 1865, the educational provision was omitted.

KENTUCKY.

Settled in 1775. Area, 37,680 square miles. Admitted into the Union in 1792.

POPULATION.

Census.	White.	Free colored.	Slaves.	Total.
1790.....	61,133	114	11,830	73,077
1800.....	179,871	741	40,343	220,595
1810.....	324,237	1,713	80,561	406,511
1820.....	434,644	2,941	126,732	564,317
1830.....	517,787	4,917	165,213	687,917
1840.....	590,253	7,317	182,258	779,828
1850.....	761,413	10,011	210,981	982,405
1860.....	919,517	10,684	225,483	1,155,684

First constitution adopted in 1790; second in 1799; and the third in 1850. Article eleventh of the last pertains to education:

ARTICLE XI.—CONCERNING EDUCATION.

SEC. 1. The capital of the fund called and known as the "Common School Fund," consisting of one million two hundred and twenty-five thousand seven hundred and sixty-eight dollars and forty-two cents, for which bonds have been executed by the State to the board of education, and seventy-three thousand five hundred dollars of stock in the Bank of Kentucky; also, the sum of fifty-one thousand two hundred and twenty-three dollars and twenty-nine cents, balance of interest on the school fund for the year 1848, unexpended, together with any sum which may be hereafter raised in the State by taxation, or otherwise, for purposes of education, shall be held inviolate, for the purpose of sustaining a system of common schools. The interest and dividends of said funds, together with any sum which may be produced for that purpose by taxation or otherwise, may be appropriated in aid of common schools, but for no other purpose. The general assembly shall invest said fifty-one thousand two hundred and twenty-three dollars and twenty-nine cents in some safe and profitable manner; and any portion of the interest and dividends of said school fund, or other money or property raised for school purposes, which may not be needed in sustaining common schools, shall be invested in like manner. The general assembly shall make provision, by law, for the payment of the interest of said school fund: *Provided*, That each county shall be entitled to its proportion of the income of said fund, and if not called for, for common school purposes, it shall be reinvested from time to time for the benefit of such county.

SEC. 2. A superintendent of public instruction shall be elected by the qualified voters of this commonwealth, at the same time the governor is elected, who shall hold his office for four years, and his duties and salary shall be prescribed and fixed by law.

TENNESSEE.

Settled in 1765. Area, 45,600 square miles. Admitted into the Union in 1796.

POPULATION.

Census.	White.	Free colored.	Slaves.	Total.
1790.....	32,013	361	3,417	35,791
1800.....	91,709	309	13,584	105,602
1810.....	215,875	1,317	44,535	261,727
1820.....	339,927	2,779	80,107	422,813
1830.....	535,746	4,555	141,603	681,904
1840.....	640,627	5,524	183,059	829,210
1850.....	756,836	6,422	239,459	1,002,717
1860.....	826,828	7,235	275,784	1,109,847

First constitution adopted in 1796, which was amended in 1835. Article eleventh, section ten, of the latter is as follows :

10. Knowledge, learning, and virtue being essential to the preservation of republican institutions, and the diffusion of the opportunities and advantages of education throughout the different portions of the State being highly conducive to the promotion of this end, it shall be the duty of the general assembly, in all future periods of this government, to cherish literature and science. And the fund called the *common school fund*, and all the lands and proceeds thereof, dividends, stocks, and other property of every description whatever, heretofore by law appropriated by the general assembly of this State for the use of common schools, and all such as shall hereafter be appropriated, shall remain a *perpetual fund*, the principal of which shall never be diminished by legislative appropriation, and the interest thereof shall be inviolably appropriated to the support and encouragement of common schools throughout the State, and for the equal benefit of all the people thereof; and no law shall be made authorizing said fund, or any part thereof, to be diverted to any other use than the support and encouragement of common schools; and it shall be the duty of the general assembly to appoint a board of commissioners, for such term of time as they may think proper, who shall have the general superintendence of said fund, and who shall make a report of the condition of the same, from time to time, under such rules, regulations, and restrictions as may be required by law: *Provided*, That if at any time hereafter a division of the public lands of the United States, or of the money arising from the sales of such lands, shall be made among the individual States, the part of such lands or money coming to this State shall be devoted to the purposes of education and internal improvement, and shall never be applied to any other purpose.

11. The above provisions shall not be construed to prevent the legislature from carrying into effect any laws that have been passed in favor of the colleges, universities, or academies, or from authorizing heirs or distributees to receive and enjoy escheated property, under such rules and regulations as from time to time may be prescribed by law.

The amendments of 1865 did not pertain to education.

OHIO.

Settled in 1788. Area, 39,964 square miles. Admitted into the Union in 1802.

POPULATION.

1800.....	45,365	1840.....	1,519,467
1810.....	230,760	1850.....	1,980,329
1820.....	581,434	1860.....	2,339,511
1830.....	937,903		

The first constitution adopted in 1802, says in article eighth :

SECTION 3. * * * Religion, morality, and knowledge being essentially necessary to good government and the happiness of mankind, schools and the means of instruction shall forever be encouraged by legislative provision, not inconsistent with the right of conscience.

SECTION 25. That no law shall be passed to prevent the in the several counties and townships within this State from an equal participation in the schools, academies, and universities within this State, which are endowed in whole or in part from the revenue arising from donations made by the United States for the support of schools and colleges, and the doors of the said schools, academies, and universities shall be open for the reception of scholars, students, and teachers of every grade, without any distinction or preference whatever contrary to the intention for which said donations are made.

In the constitution of 1851, section seventh of the first article says :

* * Religion, morality, and knowledge, however, being essential to good government, it shall be the duty of the general assembly to pass suitable laws to protect every religious denomination in the peaceable enjoyment of its own mode of public worship, and to encourage schools and the means of instruction.

And article sixth also pertains to education.

ARTICLE VI.—EDUCATION.

SECTION 1. The principal of all funds arising from the sale or other disposition of lands, or other property, granted or intrusted to this State for educational and religious purposes, shall forever be preserved inviolate and undiminished ; and the income arising therefrom shall be faithfully applied to the specific objects of the original grants or appropriations.

SEC. 2. The general assembly shall make such provisions, by taxation or otherwise, as, with the income arising from the school trust fund, will secure a thorough and efficient system of common schools throughout the State ; but no religious or other sect or sects shall ever have any exclusive right to, or control of, any part of the school funds of this State.

LOUISIANA.

Settled in 1699. Area, 46,341 square miles. Admitted into the Union in 1812.

POPULATION.

Census.	White.	Free Colored.	Slaves.	Total.
1800.....	34, 311	7, 585	34, 660	76, 556
1820.....	73, 383	10, 476	69, 064	153, 407
1830.....	89, 441	16, 710	109, 568	215, 739
1840.....	158, 457	25, 502	168, 452	352, 411
1850.....	255, 491	17, 462	244, 809	517, 762
1860.....	357, 629	18, 647	331, 726	708, 002

First constitution was formed in 1812, in which there is nothing relative to education.

The constitution of 1845, under the caption of title seven, has the following :

TITLE VII.—PUBLIC EDUCATION.

ARTICLE 133. There shall be appointed a superintendent of public education, who shall hold his office for two years. His duties shall be prescribed by law. He shall receive such compensation as the legislature may direct.

ART. 134. The legislature shall establish free public schools throughout the State, and shall provide means for their support by taxation on property, or otherwise.

ART. 135. The proceeds of all lands heretofore granted by the United States to this State for the use or support of schools, and of all lands which may hereafter be granted or bequeathed to the State, and not expressly granted or bequeathed for any other purpose, which hereafter may be disposed of by the State, and the proceeds of the estates of deceased persons to which the State may become entitled by law, shall be held by the State as a loan, and shall be and remain a perpetual fund, on which the State shall pay an annual interest of six per centum; which interest, together with all the rents of the unsold lands, shall be appropriated to the support of such schools; and this appropriation shall remain inviolable.

ART. 136. All moneys arising from the sales which have been, or may hereafter be, made of any lands heretofore granted by the United States to this State, for the use of a seminary of learning, and from any kind of donation that may hereafter be made for that purpose, shall be and remain a perpetual fund, the interest of which, at six per cent. per annum, shall be appropriated to the support of a seminary of learning for the promotion of literature and the arts and sciences, and no law shall ever be made diverting said fund to any other use than to the establishment and improvement of said seminary of learning.

ART. 137. An university shall be established in the city of New Orleans. It shall be composed of four faculties, to wit: One of law, one of medicine, one of the natural sciences, and one of letters.

ART. 138. It shall be called the "University of Louisiana," and the Medical College of Louisiana, as at present organized, shall constitute the faculty of medicine.

ART. 139. The legislature shall provide by law for its further organization and government, but shall be under no obligation to contribute to the establishment or support of said university by appropriations.

The constitution of 1852, in title eight, in these words provides:

TITLE VIII.—PUBLIC EDUCATION.

ARTICLE 135. There shall be elected a superintendent of public education, who shall hold his office for the term of two years. His duties shall be prescribed by law, and he shall receive such compensation as the legislature may direct: *Provided*, That the general assembly shall have power, by a vote of the majority of the members elected to both houses, to abolish the said office of superintendent of public education, whenever in their opinion said office shall be no longer necessary.

136. The general assembly shall establish free public schools throughout the State, and shall provide for their support by general taxation on property or otherwise; and all moneys so raised or provided shall be distributed to each parish, in proportion to the number of free white children between such ages as shall be fixed by the general assembly.

137. The proceeds of all lands heretofore granted by the United States to this State for the use or support of schools, and of all lands which may hereafter be granted or bequeathed to the State, and not expressly granted or bequeathed for any other purpose, which hereafter may be disposed of by the State, and the proceeds of the estates of deceased persons to which the State may become entitled by law, shall be held by the State as a loan, and shall be and remain a perpetual fund, on which the State shall pay an annual interest of six per cent.; which interest, together with the interest on the trust funds deposited with this State by the United States, under the act of Congress approved June 23, 1836, and all the rents of the unsold lands, shall be appropriated to the support of such schools; and this appropriation shall remain inviolable.

138. All moneys arising from the sales which have been, or may hereafter be, made of any lands heretofore granted by the United States to this State for the use of a seminary of learning, and from any kind of donation that may hereafter be made for that purpose, shall be and remain a perpetual fund, the interest of which, at six per cent. per annum, shall be appropriated to the support of a seminary of learning, for the promotion of literature and the arts and sciences; and no law shall ever be made diverting said fund to any other use than to the establishment and improvement of said seminary of learning.

139. The University of Louisiana, in New Orleans, as now established, shall be maintained.

140. The legislature shall have power to pass such laws as may be necessary for the further regulation of the university, and for the promotion of literature and science, but shall be under no obligation to contribute to the support of said university by appropriations.

The constitution of 1864 has the following :

TITLE XL.—PUBLIC EDUCATION.

ARTICLE 140. There shall be elected a superintendent of public education, who shall hold his office for the term of four years. His duties shall be prescribed by law, and he shall receive a salary of four thousand dollars per annum until otherwise provided by law: *Provided*, That the general assembly shall have power, by a vote of a majority of the members elected to both houses, to abolish the said office of superintendent of public education whenever, in their opinion, said office shall be no longer necessary.

ART. 141. The legislature shall provide for the education of all children of the State, between the ages of six and eighteen years, by maintenance of free public schools by taxation or otherwise.

ART. 142. The general exercises in the common schools shall be conducted in the English language.

ART. 143. A university shall be established in the city of New Orleans. It shall be composed of four faculties, to wit: One of law, one of medicine, one of the natural sciences, and one of letters. The legislature shall provide by law for its organization and maintenance.

ART. 144. The proceeds of all lands heretofore granted by the United States to this State for the use or purpose of the public schools, and of all lands which may hereafter be granted or bequeathed for that purpose, and the proceeds of the estates of deceased persons to which the State may become entitled by law, shall be and remain a perpetual fund, on which the State shall pay an interest of six per cent.; which interest, together with the interest of the trust fund, deposited with the State by the United States under the act of Congress approved June 23, 1836, and all the rents of unsold lands, shall be appropriated to the purpose of such schools; and this appropriation shall remain inviolable.

ART. 145. All moneys arising from the sales which have been, or may hereafter be, made of any lands heretofore granted by the United States to this State for the use of a specific seminary of learning, or from any kind of donation that may hereafter be made for that purpose, shall be and remain a perpetual fund, the interest of which, at six per cent. per annum, shall be appropriated to the promotion of literature and the arts and sciences, and no law shall ever be made diverting said fund to any other use than to the establishment and improvement of said seminary of learning, in such manner as it may deem proper.

ART. 146. No appropriation shall be made by the legislature for the support of any private school or institution of learning, but the highest encouragement shall be granted to public schools throughout the State.

INDIANA.

Settled in 1730. Area, 33,809 square miles. Admitted into the Union in 1816.

POPULATION.

1800.....	4, 875	1840.....	685, 866
1810.....	45, 365	1850.....	988, 416
1820.....	147, 178	1860.....	1, 350, 428
1830.....	343, 031		

The first constitution was adopted in 1816; article ninth of which pertained to

EDUCATION.

SECTION 1. Knowledge and learning generally diffused through a community being essential to the preservation of a free government, and spreading the opportunities and advantages of education through the various parts of the country being highly conducive to this end, it shall be the duty of the general assembly to provide by law for the improvement of such lands as are, or hereafter may be, granted by the United States to this State for the use of schools, and to apply any funds which may be raised from such lands, or from any other quarter, to the accomplishment of the grand object for which they are, or may be, intended. But no lands granted for the use of schools or seminaries of learning shall be sold by authority of this State prior to the year eighteen hundred and twenty; and the moneys which may be raised out of the sale of any such lands, or otherwise obtained for the purposes aforesaid, shall be, and remain a fund, for the exclusive purpose of promoting the interest of literature and the sciences, and for the support of seminaries and public schools. The general assembly shall from time to time pass such laws as shall be calculated to encourage intellectual, scientific, and agricultural improvements, by allowing rewards and immunities for the promotion and improvement of arts, sciences, commerce, manufactures, and natural history, and to countenance and encourage the principles of humanity, industry, and morality.

SECTION 2. It shall be the duty of the general assembly, as soon as circumstances will permit, to provide by law for a general system of education, ascending in a regular gradation from township schools to a State university, wherein tuition shall be gratis, and equally open to all.

SECTION 3. And for the promotion of such salutary end the money which shall be paid as an equivalent by persons exempt from militia duty, except in times of war, shall be exclusively and in equal proportion applied to the support of county seminaries. Also, all fines assessed for any breach of the penal laws shall be applied to said seminaries in the counties wherein they shall be assessed.

SECTION 4. It shall be the duty of the general assembly, as soon as circumstances will permit, to form a penal code, founded on the principles of reformation and not vindictive justice; and also to provide one or more farms, to be an asylum for those persons who by reason of age, infirmity, or other misfortunes, may have a claim upon the aid and beneficence of society, on such principles that such persons may therein find employment and every reasonable comfort, and lose, by their usefulness, the degrading sense of dependence.

SECTION 5. The general assembly, at the time they lay off a new county, shall cause at least ten per cent. to be reserved out of the sales of town lots in the seat of justice of such county, for the use of a public library for such county, and at the same session they shall incorporate a library company, under such rules and regulations as will best secure its permanence, and extend its benefits.

The second constitution was adopted in 1851, and has a full article on education:

ARTICLE VIII.—EDUCATION.

SEC. 1. Knowledge and learning generally diffused throughout a community being essential to the preservation of a free government, it shall be the duty of the general assembly to encourage, by all suitable means, moral, intellectual, scien-

106 CONSTITUTIONAL PROVISION RESPECTING EDUCATION.

tific, and agricultural improvement, and to provide by law for a general and uniform system of common schools, wherein tuition shall be without charge, and equally open to all.

2. The common school fund shall consist of the congressional township fund and the lands belonging thereto;

The surplus revenue fund;

The saline fund, and the lands belonging thereto;

The bank tax fund, and the fund arising from the one hundred and fourteenth section of the charter of the State Bank of Indiana;

The fund to be derived from the sale of county seminaries, and the moneys and property heretofore held for such seminaries; from the fines assessed for breaches of the penal laws of the State; and from all forfeitures which may accrue;

All lands and other estate which shall escheat to the State for want of heirs or kindred entitled to the inheritance;

All lands that have been, or may hereafter be, granted to the State, where no special purpose is expressed in the grant, and the proceeds of the sales thereof, including the proceeds of the sales of the swamp lands granted to the State of Indiana by the act of Congress of 28th September, 1850, after deducting the expense of selecting and draining the same;

Taxes on the property of corporations that may be assessed for common school purposes.

3. The principal of the common school fund shall remain a perpetual fund, which may be increased, but shall never be diminished; and the income thereof shall be inviolably appropriated to the support of common schools, and to no other purpose whatever.

4. The general assembly shall invest, in some safe and profitable manner, all such portions of the common school fund as have not heretofore been intrusted to the several counties; and shall make provision by law for the distribution among the several counties of the interest thereof.

5. If any county shall fail to demand its proportion of such interest for common school purposes, the same shall be reinvested for the benefit of such county.

6. The several counties shall be held liable for the preservation of so much of the said fund as may be intrusted to them, and for the payment of the annual interest thereon.

7. All trust funds held by the State shall remain inviolate, and be faithfully and exclusively applied to the purposes for which the trust was created.

8. The general assembly shall provide for the election, by the voters of the State, of a state superintendent of public instruction, who shall hold his office for two years, and whose duties and compensation shall be prescribed by law.

MISSISSIPPI.

Settled in 1716. Area, 47,156 square miles. Admitted as a State in 1817.

POPULATION.

Census.	White.	Free colored.	Slaves.	Total.
1800	5, 179	182	3, 489	8, 850
1810	23, 024	240	17, 088	40, 352
1820	42, 176	458	32, 814	75, 448
1830	20, 443	519	65, 659	136, 621
1840	179, 074	1, 366	195, 211	375, 651
1850	295, 718	930	309, 878	606, 526
1860	353, 901	773	436, 631	791, 305

Adopted a constitution in 1817, amended in 1832 and in 1865. Section fourteenth, article seventh, is in this language :

14. Religion, morality, and knowledge being necessary to good government, the preservation of liberty, and the happiness of mankind, schools, and the means of education, shall forever be encouraged in this State.

ILLINOIS.

Settled in 1720. Area, 55,409 square miles. Admitted into the Union in 1818.

POPULATION.

1810.....	12,284	1840.....	476,183
1820.....	55,210	1850.....	851,470
1830.....	157,445	1860.....	1,711,951

The first constitution was adopted in 1818, and the second in 1847, neither of which contains any provision relative to education.

ALABAMA.

Originally a part of Georgia. Area, 46,000 square miles. Admitted into the Union in 1819.

POPULATION.

Census.	Whites.	Free colored.	Slaves.	Total.
1820.....	85,451	571	41,879	127,901
1830.....	190,406	1,572	117,549	309,527
1840.....	335,185	2,039	253,536	590,753
1850.....	426,514	2,265	343,844	771,623
1860.....	526,431	2,690	435,089	964,201

The constitution of 1819, which was in force in 1860, makes the following provision relative to

EDUCATION.

Schools and the means of education shall forever be encouraged in this State; and the general assembly shall take measures to preserve from unnecessary waste or damage such lands as are, or hereafter may be, granted by the United States for the use of schools within each township in this State, and apply the funds which may be raised from such lands in strict conformity to the object of such grant. The general assembly shall take like measures for the improvement of such lands as have been, or may be hereafter, granted by the United States to this State for the support of a seminary of learning; and the moneys which may be raised from such lands, by rent, lease, or sale, or from any other quarter, for the purpose aforesaid, shall be and remain a fund for the exclusive support of a State university, for the promotion of the arts, literature, and the sciences; and it shall be the duty of the general assembly, as early as may be, to provide effectual means for the improvement and permanent security of the funds and endowments of such institution.

The Constitution of 1865 retains this provision.

The constitution of 1865 includes the above provision, making it imperative on the Legislature "to enact necessary and proper laws for the encouragement of schools and the means of education."

MISSOURI.

Settled in 1763. Area 67,380 square miles. Admitted into the Union in 1820.

POPULATION.

Census.	White.	Free colored.	Slaves.	Total.
1810.....	17,227	607	3,011	20,845
1820.....	55,968	376	10,222	66,566
1830.....	114,795	569	25,091	140,455
1840.....	323,888	1,574	58,240	383,702
1850.....	592,004	2,618	87,422	682,044
1860.....	1,063,509	3,572	114,931	1,182,012

The constitution adopted in 1820 devotes article sixth to education :

ARTICLE VI.—OF EDUCATION.

SECTION. 1. Schools, and the means of education, shall forever be encouraged in this State; and the general assembly shall take measures to preserve from waste or damage such lands as have been, or hereafter may be, granted by the United States for the use of schools within each township in this State, and shall apply the funds which may arise from such lands in strict conformity to the object of the grant. One school, or more, shall be established in each township, as soon as practicable and necessary, where the poor shall be taught gratis.

SEC. 2. The general assembly shall take measures for the improvement of such lands as have been, or hereafter may be, granted by the United States to this State for the support of a seminary of learning; and the funds accruing from such lands by rent or lease, or in any other manner, or which may be obtained from any other source, for the purposes aforesaid, shall be and remain a permanent fund to support a university for the promotion of literature and of the arts and sciences; and it shall be the duty of the general assembly, as soon as may be, to provide effectual means for the improvement of such lands, and for the improvement and permanent security of the funds and endowments of such institution.

The constitution of 1865 has the following :

ARTICLE IX.—EDUCATION.

SECTION 1. A general diffusion of knowledge and intelligence being essential to the preservation of the rights and liberties of the people, the General Assembly shall establish and maintain free schools for the gratuitous instruction of all persons in this State between the ages of five and twenty-one years.

2. Separate schools may be established for children of African descent. All funds provided for the support of public schools shall be appropriated in proportion to the number of children, without regard to color.

3. The supervision of public instruction shall be vested in a Board of Education, whose powers and duties shall be prescribed by law. A Superintendent of Public Schools, who shall be the president of the board, shall be elected by the qualified voters of the State. He shall possess the qualifications of a State Sena-

tor, and hold his office for the term of four years, and shall perform such duties and receive such compensation as may be prescribed by law. The Secretary of State and Attorney General shall be *ex officio* members, and with the Superintendent compose said Board of Education.

4. The General Assembly shall also establish and maintain a State University, with departments for instruction in teaching, in agriculture, and in natural science, as soon as the public school fund will permit.

5. The proceeds of all lands that have been or hereafter may be granted by the United States to this State, and not otherwise appropriated by this State or the United States; also all moneys, stocks, bonds, lands, and other property now belonging to any fund for purposes of education; also the net proceeds of all sales of lands and other property and effects that may accrue to the State by escheat, or from sales of estrays, or from unclaimed dividends, or distributive shares of the estates of deceased persons, or from fines, penalties, and forfeitures; also any proceeds of the sales of public lands which may have been or hereafter may be paid over to this State (if Congress will consent to said appropriation;) also all other grants, gifts, or devises that have been or hereafter may be made to this State, and not otherwise appropriated by the terms of the grant, gift, or devise, shall be securely invested and sacredly preserved as a public school fund, the annual income of which fund, together with so much of the ordinary revenue of the State as may be necessary, shall be faithfully appropriated for establishing and maintaining the free schools and the university in the article provided for, and for no other uses or purposes whatever.

6. No part of the public school fund shall ever be invested in the stock or bonds or other obligations of any State, or of any county, city, town, or corporation. The stock of the Bank of the State of Missouri, now held for school purposes, and all other stocks belonging to any school or university fund, shall be sold in such manner and at such time as the General Assembly shall prescribe; and the proceeds thereof, and the proceeds of the sales of any lands or other property which now belong or may hereafter belong to said school fund, may be invested in the bonds of the United States. All county school funds shall be loaned upon good and unincumbered real estate security, with personal security in addition thereto.

7. No township or school district shall receive any portion of the public school fund, unless a free school shall have been kept therein for not less than three months during the year for which distribution thereof is made. The General Assembly shall have power to require by law that every child of sufficient mental and physical ability shall attend the public schools during the period between the ages of five and eighteen years for a term equivalent to sixteen months, unless educated by other means.

8. In case the public school fund shall be insufficient to sustain a free school at least four months in every year, in each school district in this State, the General Assembly may provide by law for the raising of such deficiency by levying a tax on all the taxable property in each county, township, or school district as they may deem proper.

9. The General Assembly shall, so far as it can be done without infringing upon vested rights, reduce all lands, moneys, and other property used or held for school purposes, in the various counties of this State, into the public school fund herein provided for; and, in making distribution of the annual income of such fund, shall take into consideration the amount of any county or city funds appropriated for common school purposes, and make such distribution as will equalize the amount appropriated for common schools throughout the State.

ARTICLE II.

SECTION 19. After the first day of January, one thousand eight hundred and sixty-six, every person who was not a qualified voter prior to that time, shall, in addition to the other qualifications required, be able to read and write in order to become a qualified voter, unless his inability to read or write shall be the result of a physical disability.

110 CONSTITUTIONAL PROVISION RESPECTING EDUCATION.

ARKANSAS.

Formed from the Louisiana purchase. Area 52,198 square miles. Admitted into the Union in 1836.

POPULATION.

Census.	White.	Free colored.	Slaves.	Total.
1820.....	12,579	77	1,617	14,273
1830.....	25,671	141	4,576	30,388
1840.....	77,174	465	19,935	97,574
1850.....	162,189	608	47,100	209,897
1860.....	324,191	144	111,115	435,450

The constitution of 1836 makes provision for education in article nine.

ARTICLE IX.—EDUCATION.

SECTION 1. Knowledge and learning generally diffused through a community being essential to the preservation of a free government, and diffusing the opportunities and advantages of education through the various parts of the State being highly conducive to this end, it shall be the duty of the general assembly to provide by law for the improvement of such lands as are or hereafter may be granted by the United States to this State for the use of schools, and to apply any funds which may be raised from such land, or from any other source, to the accomplishment of the object for which they are or may be intended. The general assembly shall, from time to time, pass such laws as shall be calculated to encourage intellectual, scientific, and agricultural improvements, by allowing rewards and immunities for the promotion and improvement of arts, science, commerce, manufactures, and natural history, and countenance and encourage the principles of humanity, industry, and morality.

In the amended constitution of 1865 this article remains, and is numbered eight.

MICHIGAN.

First settled in 1650. Area 56,243 square miles. Admitted into the Union in 1837.

POPULATION.

1810.....	4,762	1840.....	212,267
1820.....	8,896	1850.....	397,654
1830.....	31,639	1860.....	749,113

The first constitution made the following provision :

ARTICLE X.—EDUCATION.

The governor shall nominate, and by and with the advice and consent of the legislature in joint vote, shall appoint a superintendent of public instruction, who shall hold his office for two years, and whose duties shall be prescribed by law.

The legislature shall encourage by all suitable means the promotion of intellectual, scientific, and agricultural improvement. The proceeds of all lands that have been, or hereafter may be, granted by the United States to this State for the support of schools, which shall hereafter be sold or disposed of, shall be and remain a perpetual fund, the interest of which, together with the rents of all such unsold lands, shall be inviolably appropriated to the support of schools throughout the State.

The legislature shall provide for a system of common schools, by which a school shall be kept up and supported in each school district at least three months in every year; and every school district neglecting to keep up and support such a school may be deprived of its equal proportion of the interest of the public fund.

As soon as the circumstances of the State will permit, the legislature shall provide for the establishment of libraries, one at least in each township; and the money which shall be paid by persons as an equivalent for exemption from military duty, and the clear proceeds of all fines assessed in the several counties for any breach of the penal laws, shall be exclusively applied for the support of said libraries.

The legislature shall take measures for the protection, improvement, or other disposition of such lands as have been, or may hereafter be, reserved or granted by the United States to this State for the support of a university; and the funds accruing from the rents or sale of such lands, or from any other source, for the purpose aforesaid, shall be and remain a permanent fund for the support of said university, with such branches as the public convenience may hereafter demand, for the promotion of literature, the arts and sciences, and as may be authorized by the terms of such grant; and it shall be the duty of the legislature, as soon as may be, to provide effectual means for the improvement and permanent security of the funds of said university.

The second constitution, adopted in 1850, devotes to education—

ARTICLE XIII.

• SECTION 1. The superintendent of public instruction shall have the general supervision of public instruction, and his duties shall be prescribed by law.

2. The proceeds from the sales of all lands that have been, or hereafter may be, granted by the United States to the State for educational purposes, or appropriated by the State for like purposes, shall be and remain a perpetual fund, the interest and income of which, together with the rents of all such lands as may remain unsold, shall be inviolably appropriated and annually applied to the specific objects of the original gift, grant, or appropriation.

3. All lands, the titles to which shall fail from a defect of heirs, shall escheat to the State; and the interest on the clear proceeds from the sales thereof shall be appropriated exclusively to the support of primary schools.

4. The legislature shall, within five years from the adoption of this constitution, provide for and establish a system of primary schools, whereby a school shall be kept, without charge for tuition, at least three months in each year, in every school district in the State, and all instruction in said schools shall be conducted in the English language.

5. A school shall be maintained in each school district at least three months in each year. Any school district neglecting to maintain such school, shall be deprived for the ensuing year of its proportion of the income of the primary school fund, and of all funds arising from taxes for the support of schools.

6. There shall be elected in each judicial circuit, at the time of the election of the judge of such circuit, a regent of the university, whose term of office shall be the same as that of such judge. The regents thus elected shall constitute the board of regents of the University of Michigan.

7. The regents of the university, and their successors in office, shall continue to constitute the body corporate, known by the name and title of "the Regents of the University of Michigan."

8. The regents of the university shall, at their first annual meeting, or as soon thereafter as may be, elect a president of the university, who shall be *ex officio* a

112. CONSTITUTIONAL PROVISION RESPECTING EDUCATION.

member of their board, with the privilege of speaking, but not of voting. He shall preside at the meetings of the regents, and be the principal executive officer of the university. The board of regents shall have the general supervision of the university, and the direction and control of all expenditures from the university interest fund.

9. There shall be elected at the general election in the year one thousand eight hundred and fifty-two, three members of a State board of education, one for two years, one for four years, and one for six years; and at each succeeding biennial election there shall be elected one member of such board, who shall hold his office for six years. The superintendent of public instruction shall be *ex officio* a member and secretary of such board. The board shall have the general supervision of the State Normal School, and their duties shall be prescribed by law.

10. Institutions for the benefit of those inhabitants who are deaf, dumb, blind or insane, shall always be fostered and supported.

11. The legislature shall encourage the promotion of intellectual, scientific and agricultural improvement; and shall, as soon as practicable, provide for the establishment of an agricultural school. The legislature may appropriate the twenty-two sections of salt spring lands now unappropriated, or the money arising from the sale of the same, where such lands have been already sold, and any land which may hereafter be granted or appropriated for such purpose, for the support and maintenance of such school, and may make the same a branch of the university for instruction in agriculture and the natural sciences connected therewith, and place the same under the supervision of the regents of the university.

12. The legislature shall also provide for the establishment of at least one librarian in each township; and all fines assessed and collected in the several counties and townships for any breach of the penal laws shall be exclusively applied to the support of such libraries.

FLORIDA.

Explored in 1512. Area, 59,268 square miles. Admitted as a State in March, 1845.

POPULATION.

Census.	White.	Free colored.	Slaves.	Total.
1830.....	18,835	844	15,501	34,730
1840.....	27,943	817	25,717	54,477
1850.....	47,203	932	39,300	87,445
1860.....	77,748	293	61,745	140,425

In the constitution presented to Congress in 1839, which was in force in 1860, article tenth pertains to education.

ARTICLE X.—EDUCATION

The proceeds of all lands granted by the United States for the use of schools shall remain a perpetual fund, the interest of which shall be used for the benefit of said schools, and for no other purpose.

In the constitution of 1865 is the following:

ARTICLE X.—EDUCATION.

SECTION 1. The proceeds of all lands for the use of schools and a seminary or seminaries of learning shall be and remain a perpetual fund, the interest of which,

together with all moneys accrued from any other source, applicable to the same object, shall be irrevocably appropriated to the use of schools and seminaries of learning, respectively, and to no other purpose.

2. The General Assembly shall take such measures as may be necessary to preserve from waste or damage all lands so granted or appropriated for the purpose of education.

TEXAS.

Settled in 1792. Area, 237,321 square miles. Admitted as a State in December, 1845.

POPULATION.

Census.	White.	Free colored.	Slaves.	Total.
1850.....	154, 431	397	58, 161	212, 592
1860.....	421, 294	355	182, 566	604, 215

Article tenth of the constitution of 1845 has the following in relation to education :

ARTICLE X.—EDUCATION.

SECTION 1. A general diffusion of knowledge being essential to the preservation of the rights and liberties of the people, it shall be the duty of the legislature of the State to make suitable provisions for the support and maintenance of public schools.

SEC. 2. The legislature shall, as early as practicable, establish a system of free schools throughout the State; and as a basis for the endowment and support of said system, all the funds, lands, and other property heretofore set apart and appropriated, or that may hereafter be set apart and appropriated for the support and maintenance of public schools, shall constitute the public school fund; and said fund, and the income derived therefrom, shall be a perpetual fund exclusively for the education of all the white scholastic inhabitants of this State, and no law shall ever be made appropriating said fund to any other use or purpose whatever. And until such time as the legislature shall provide for the establishment of such system of public schools in the State, the fund thus created and the income derived therefrom, shall remain as a charge against the State, and be passed to the credit of the free common school fund.

SEC. 3. And all the alternate sections of land reserved by the State out of grants heretofore made, or that may hereafter be made, to railroad companies or other corporations of any nature whatever, for internal improvements, or for the development of the wealth and resources of the State, shall be set apart as a part of the perpetual school fund of the State; provided, that if at any time hereafter any portion of the public domain of this State shall be sold, and by virtue of said sale the jurisdiction over said land shall be vested in the United States government, in such event one-half of the proceeds derived from said sale shall become a part of the perpetual school fund of the State; and the legislature shall hereafter appropriate one-half of the proceeds resulting from all sales of the public lands to the perpetual public school fund.

SEC. 4. The legislature shall provide, from time to time, for the sale of lands belonging to the perpetual public school fund, upon such time and terms as it may deem expedient; provided, that in cases of sale the preference shall be given to actual settlers; and, provided further, that the legislature shall have no power to grant relief to purchasers by granting further time for payment, but shall, in all cases, provide for the forfeiture of the land to the State for the benefit of a

perpetual public school fund; and that all interest accruing upon such sales shall be a part of the income belonging to the school fund, and subject to appropriation annually for educational purposes.

SEC. 5. The legislature shall have no power to appropriate or loan or invest, except as follows, any part of the principal sum of the perpetual school fund for any purpose whatever; and it shall be the duty of the legislature to appropriate annually the income which may be derived from said fund, for educational purposes, under such system as it may adopt; and it shall, from time to time, cause the principal sum now on hand and arising from sales of land, or from any other source, to be invested in the bonds of the United States of America, or the bonds of the State of Texas, or such bonds as the State may guarantee.

SEC. 6. All public lands which have been heretofore, or may be hereafter, granted for public schools to the various counties or other political divisions in this State, shall be under the control of the legislature, and may be sold on such terms and under such regulations as the legislature shall by law prescribe; and the proceeds of the sale of said lands shall be added to the perpetual school fund of the State. But each county shall receive the full benefit of the interest arising from the proceeds of the sale of the lands granted to them respectively; provided that the lands already patented to the counties shall not be sold without the consent of such county or counties to which the lands may belong.

SEC. 7. The legislature may provide for the levying of a tax for educational purposes; provided, the taxes levied shall be distributed from year to year, as the same may be collected; and, provided, that all the sums arising from said tax which may be collected from Africans, or persons of African descent, shall be exclusively appropriated for the maintenance of a system of public schools for Africans and their children; and it shall be the duty of the legislature to encourage schools among these people.

SEC. 8. The moneys and lands heretofore granted to, or which may hereafter be granted for the endowment and support of one or more universities, shall constitute a special fund for the maintenance of said universities; and until the university or universities are located and commenced, the principal, and the interest arising from the investment of the principal, shall be invested in like manner, and under the same restrictions as provided for the investment and control of the perpetual public school fund, in sections four and five (4 and 5) in this article of the Constitution, and the legislature shall have no power to appropriate the university fund for any other purpose than that of the maintenance of said universities, and the legislature shall, at an early day, make such provisions, by law, as will organize and put into operation the university.

SEC. 9. The four hundred thousand acres of land that have been surveyed and set apart, under the provisions of a law approved 30th August, A. D. 1856, for the benefit of a lunatic asylum, a deaf and dumb asylum, a blind asylum, and an orphan asylum, shall constitute a fund for the support of such institutions, one-fourth part for each; and the said fund shall never be diverted to any other purpose. The said lands may be sold, and the fund invested under the same rules and regulations as provided for the lands belonging to the school fund. The income of said fund only shall be applied to the support of such institutions; and, until so applied, shall be invested in the same manner as the principal.

SEC. 10. The governor, by and with the advice and consent of two-thirds of the senate, shall appoint an officer, to be styled the superintendent of public instruction. His term of office shall be four years, and his annual salary shall not be less than (\$2,000) two thousand dollars, payable at stated times; and the governor, comptroller, and superintendent of public education shall constitute a board to be styled a board of education, and shall have the general management and control of the perpetual school fund, and common schools, under such regulations as the legislature may hereafter prescribe.

SEC. 11. The several counties in this State which have not received their quantum of the lands for the purposes of education, shall be entitled to the same quantity heretofore appropriated by the Congress of the Republic of Texas, and the State, to other counties. And the counties which have not had the lands to which they are entitled for educational purposes located shall have the right to contract for the location, surveying, and procuring the patents for said lands, and of paying for the same with any portion of said lands so patented, not to exceed one-fourth

of the whole amount to be so located, surveyed, and patented—to be divided according to quality, allowing to each part a fair proportion of land, water, and timber.

IOWA.

Organized as a Territory in 1838. Area, 55,405 square miles.
Admitted into the Union in 1846.

POPULATION.

1850..... 192,214 || 1860..... 674,913

The constitution of 1846 devotes article tenth to education and school lands.

ARTICLE X.—EDUCATION AND SCHOOL LANDS.

SEC. 1. The general assembly shall provide for the election, by the people, of a superintendent of public instruction, who shall hold his office for three years, and whose duties shall be prescribed by law, and who shall receive such compensation as the general assembly may direct.

2. The general assembly shall encourage, by all suitable means, the promotion of intellectual, scientific, moral and agricultural improvement. The proceeds of all lands that have been or hereafter may be granted by the United States to this State for the support of schools, which shall hereafter be sold or disposed of, and the five hundred thousand acres of land granted to the new States under an act of Congress distributing the proceeds of the public lands among the several States of the Union, approved A. D. 1841, and all estates of deceased persons who may have died without leaving a will or heir, and also such per cent. as may be granted by Congress on the sale of lands in this State, shall be and remain a perpetual fund, the interest of which, together with all the rents of the unsold lands, and such other means as the general assembly may provide, shall be inviolably appropriated to the support of common schools throughout the State.

3. The general assembly shall provide for a system of common schools, by which a school shall be kept up and supported in each school district, at least three months in every year; and any school district neglecting to keep up and support such a school may be deprived of its proportion of the interest of the public fund during such neglect.

4. The money which shall be paid by persons as an equivalent for exemption from military duty, and the clear proceeds of all fines collected in the several counties for any breach of the penal laws, shall be exclusively applied, in the several counties in which such money is paid or fine collected, among the several school districts of said counties, in the proportion to the number of inhabitants in such districts, to the support of common schools or the establishment of libraries, as the general assembly shall, from time to time, provide by law.

5. The general assembly shall take measures for the protection, improvement, or other disposition of such lands as have been or may hereafter be reserved or granted by the United States, or any person or persons, to this State, for the use of a university; and the funds accruing from the rents or sale of such lands, or from any other source, for the purpose aforesaid, shall be and remain a permanent fund, the interest of which shall be applied to the support of said university, with such branches as the public convenience may hereafter demand, for the promotion of literature, the arts and sciences, as may be authorized by the terms of such grant. And it shall be the duty of the general assembly, as soon as may be, to provide effectual means for the improvement and permanent security of the funds of said university.

The constitution of 1857 says :

ARTICLE IX.—FIRST.—EDUCATION.

SEC. 1. The educational interest of the State, including common schools and other educational institutions, shall be under the management of a board of education, which shall consist of the lieutenant governor, who shall be the presiding officer of the board, and have the casting vote in case of a tie, and one member to be elected from each judicial district in the State.

2. No person shall be eligible as a member of said board who shall not have attained the age of twenty-five years, and shall have been one year a citizen of the State.

3. One member of said board shall be chosen by the qualified electors of each district, and shall hold the office for the term of four years, and until his successor is elected and qualified. After the first election under this constitution, the board shall be divided, as nearly as practicable, into two equal classes, and the seats of the first class shall be vacated after the expiration of two years; and one-half of the board shall be chosen every two years thereafter.

4. The first session of the board of education shall be held at the seat of government on the first Monday of December after their election; after which the general assembly may fix the time and place of meeting.

5. The session of the board shall be limited to twenty days, and but one session shall be held in any one year, except upon extraordinary occasions, when, upon the recommendation of two-thirds of the board, the governor may order a special session.

6. The board of education shall appoint a secretary, who shall be the executive officer of the board, and perform such duties as may be imposed upon him by the board and the laws of the State. They shall keep a journal of their proceedings, which shall be published and distributed in the same manner as the journals of the general assembly.

7. All rules and regulations made by the board shall be published and distributed to the several counties, townships, and school districts, as may be provided for by the board, and when so made, published, and distributed, they shall have the force and effect of law.

8. The board of education shall have full power and authority to legislate and make all needful rules and regulations in relation to common schools and other educational institutions that are instituted; to receive aid from the school or university fund of this State; but all acts, rules, and regulations of said board may be altered, amended, or repealed by the general assembly; and when so altered, amended, or repealed, they shall not be re-enacted by the board of education.

9. The governor of the State shall be, *ex officio*, a member of said board.

10. The board shall have no power to levy taxes or make appropriations of money. Their contingent expenses shall be provided for by the general assembly.

11. The State university shall be established at one place, without branches at any other place, and the university fund shall be applied to that institution and no other.

12. The board of education shall provide for the education of all the youths of the State, through a system of common schools, and such schools shall be organized and kept in each school district at least three months in each year. Any district failing, for two consecutive years, to organize and keep up a school, as aforesaid, may be deprived of its portion of the school fund.

13. The members of the board of education shall each receive the same per diem during the time of their session, and mileage going to and returning therefrom, as members of the general assembly.

14. A majority of the board shall constitute a quorum for the transaction of business; but no rule, regulation, or law for the government of common schools, or other educational institutions, shall pass without the concurrence of a majority of all the members of the board, which shall be expressed by the yeas and nays on the final passage. The style of all acts of the board shall be, "Be it enacted by the board of education of the State of Iowa."

15. At any time after the year one thousand eight hundred and sixty-three, the general assembly shall have power to abolish or reorganize said board of educa-

tion, and provide for the educational interest of the State in any other manner that to them shall seem best and proper.

SECOND.—SCHOOL FUNDS AND SCHOOL LANDS.

SEC. 1. The educational and school funds and lands shall be under the control and management of the general assembly of this State.

2. The university lands, and the proceeds thereof, and all moneys belonging to said fund, shall be a permanent fund for the sole use of the State university. The interest arising from the same shall be annually appropriated for the support and benefit of said university.

3. The general assembly shall encourage, by all suitable means, the promotion of intellectual, scientific, moral, and agricultural improvement. The proceeds of all lands that have been, or hereafter may be, granted by the United States to this State for the support of schools, which may have been or shall hereafter be sold or disposed of, and the five hundred thousand acres of land granted to the new States, under an act of Congress distributing the proceeds of the public lands among the several States of the Union, approved in the year of our Lord one thousand eight hundred and forty-one, and all estates of deceased persons who may have died without leaving a will or heir, and also such per cent. as has been or may hereafter be granted by Congress on the sale of lands in this State, shall be and remain a perpetual fund, the interest of which, together with all rents of the unsold lands, and such other means as the general assembly may provide, shall be inviolably appropriated to the support of common schools throughout the State.

4. The money which may have been or shall be paid by persons as an equivalent for exemption from military duty, and the clear proceeds of all fines collected in the several counties for any breach of the penal laws, shall be exclusively applied, in the several counties in which such money is paid, or fine collected, among the several school districts of said counties, in proportion to the number of youths subject to enumeration in such districts, to the support of common schools, or the establishment of libraries, as the board of education shall from time to time provide.

5. The general assembly shall take measures for the protection, improvement, or other disposition of such lands as have been, or may hereafter be, reserved or granted by the United States, or any person or persons, to this State, for the use of the university, and the funds accruing from the rents or sales of such lands, or from any other source for the purpose aforesaid, shall be and remain a permanent fund, the interest of which shall be applied to the support of said university for the promotion of literature and the arts and sciences, as may be authorized by the terms of such grant. And it shall be the duty of the general assembly, as soon as may be, to provide effectual means for the improvement and permanent security of the funds of said university.

6. The financial agents of the school funds shall be the same that, by law, receive and control the State and county revenue for other civil purposes, under such regulations as may be provided by law.

7. The money subject to the support and maintenance of common schools shall be distributed to the districts in proportion to the number of youths between the ages of five and twenty-one years, in such manner as may be provided by the general assembly.

WISCONSIN.

Occupied by fur traders in 1670. Organized as a Territory in 1836. Area, 53,924 square miles. Admitted as a State in 1848.

POPULATION.

1840..... 30,945 || 1850 306,391 || 1861..... 775,881

Article tenth of its constitution pertains to education.

ARTICLE X.—EDUCATION.

SEC. 1. The supervision of public instruction shall be vested in a state superintendent and such other officers as the legislature shall direct. The state superintendent shall be chosen by the qualified electors of the State, in such manner as the legislature shall provide: his powers, duties, and compensation shall be prescribed by law: *Provided*, That his compensation shall not exceed the sum of twelve hundred dollars annually.

2. The proceeds of all lands that have been or hereafter may be granted by the United States to this State for educational purposes, (except the lands heretofore granted for the purposes of a university,) and all moneys and the clear proceeds of all property that may accrue to the State by forfeiture or escheat, and all moneys which may be paid as an equivalent for exemption from military duty, and the clear proceeds of all fines collected in the several counties for any breach of the penal laws, and all moneys arising from any grant to the State, where the purposes of such grant are not specified, and the five hundred thousand acres of land to which the State is entitled by the provisions of an act of Congress entitled "An act to appropriate the proceeds of the sales of the public lands, and to grant pre-emption rights," approved the fourth day of September, one thousand eight hundred and forty-one, and also the five *per centum* of the net proceeds of the public lands to which the States shall become entitled on her admission into the Union, (if Congress shall consent to such appropriation of the two grants last mentioned,) shall be set apart as a separate fund, to be called the school fund, the interest of which, and all other revenues derived from the school lands, shall be exclusively applied to the following objects, to wit:

1. To the support and maintenance of common schools in each school district, and the purchase of suitable libraries and apparatus therefor.

2. The residue shall be appropriated to the support and maintenance of academies and normal schools, and suitable libraries and apparatus therefor.

3. The legislature shall provide by law for the establishment of district schools, which shall be as nearly uniform as practicable; and such schools shall be free and without charge for tuition to all children between the ages of four and twenty years; and no sectarian instruction shall be allowed therein.

4. Each town and city shall be required to raise by tax, annually, for the support of common schools therein, a sum not less than one-half the amount received by such town or city respectively for school purposes from the income of the school fund.

5. Provision shall be made by law for the distribution of the income of the school fund among the several towns and cities of the State, for the support of common schools therein, in some just proportion to the number of children and youth resident therein, between the ages of four and twenty years; and no appropriation shall be made from the school fund to any city or town, for the year in which said city or town shall fail to raise such tax, nor to any school district for the year in which a school shall not be maintained at least three months.

6. Provision shall be made by law for the establishment of a State university, at or near the seat of the State government, and for connecting with the same from time to time such colleges in different parts of the State as the interests of education may require. The proceeds of all lands that have been or may hereafter be granted by the United States to the State for the support of a university, shall be and remain a perpetual fund, to be called the "university fund," the interest of which shall be appropriated to the support of the State university; and no sectarian instruction shall be allowed in such university.

7. The secretary of state, treasurer, and attorney general shall constitute a board of commissioners for the sale of the school and university lands, and for the investment of the funds arising therefrom. Any two of said commissioners shall be a quorum for the transaction of all business pertaining to the duties of their office.

8. Provision shall be made by law for the sale of all school and university lands, after they shall have been appraised; and when any portion of such lands shall be sold, and the purchase money shall not be paid at the time of the sale, the commissioners shall take security by mortgage upon the land sold, for the sum remaining unpaid, with seven per cent. interest thereon, payable annually at the office of the treasurer. The commissioners shall be authorized to execute good

and sufficient conveyance to all purchasers of such lands, and to discharge any mortgages taken as security, when the sum due thereon shall have been paid. The commissioners shall have power to withhold from sale any portion of such lands when they shall deem it expedient; and shall invest all moneys arising from the sale of such lands, as well as all other university and school funds, in such manner as the legislature shall provide, and shall give such security for the faithful performance of their duties as may be required by law.

CALIFORNIA.

Settled in 1769 by the Spanish. Area, 155,500 square miles. Admitted into the Union in 1850.

POPULATION.

1850..... 92,597 || 1860..... 397,994

Its constitution of 1849 has the following :

ARTICLE IX.—EDUCATION.

SEC. 1. The legislature shall provide for the election by the people of a superintendent of public instruction, who shall hold his office for three years, and whose duties shall be prescribed by law, and who shall receive such compensation as the legislature may direct.

2. The legislature shall encourage, by all suitable means, the promotion of intellectual, scientific, moral, and agricultural improvement. The proceeds of all land that may be granted by the United States to this State for the support of schools, which may be sold or disposed of, and the five hundred thousand acres of land granted to the new States, under an act of Congress distributing the proceeds of the public lands among the several States of the Union, approved A. D. 1841; and all estates of deceased persons who may have died without leaving a will or heir, and also such per cent. as may be granted by Congress on the sale of lands in this State, shall be and remain a perpetual fund, the interest of which, together with all the rents of the unsold lands, and such other means as the legislature may provide, shall be inviolably appropriated to the support of common schools throughout the State.

3. The legislature shall provide for a system of common schools, by which a school shall be kept up and supported in each district at least three months in every year; and any school district neglecting to keep up and support such a school may be deprived of its proportion of the interest of the public fund during such neglect.

4. The legislature shall take measures for the protection, improvement, or other disposition of such lands as have been or may hereafter be reserved or granted by the United States, or any person or persons, to the State for the use of a university; and the funds accruing from the rents or sale of such lands, or from any other source for the purpose aforesaid, shall be and remain a permanent fund, the interest of which shall be applied to the support of said university, with such branches as the public convenience may demand, for the promotion of literature and the arts and sciences, as may be authorized by the terms of such grant. And it shall be the duty of the legislature, as soon as may be, to provide effectual means for the improvement and permanent security of the funds of said university.

MINNESOTA.

Explored by French traders in 1659. Organized as a Territory in 1849. Area, 81,259 square miles. Admitted into the Union in 1858.

POPULATION.

1850..... 6,077 || 1860..... 172,413

Article eighth of the constitution relates to school funds, education, and science.

ARTICLE VIII.—SCHOOL FUNDS, EDUCATION, AND SCIENCE.

SEC. 1. The stability of a republican form of government depending mainly upon the intelligence of the people, it shall be the duty of the legislature to establish a general and uniform system of public schools.

2. The proceeds of such lands as are or hereafter may be granted by the United States for the use of schools within each township in this State shall remain a perpetual school fund to the State, and not more than one-third of said lands may be sold in two years, one-third in five years, and one-third in ten years; but the lands of the greatest valuation shall be sold first: *Provided*, That no portion of said lands shall be sold otherwise than at public sale. The principal of all funds arising from sales or other disposition of lands, or other property, granted or intrusted to this State, in each township, for educational purposes, shall forever be preserved inviolate and undiminished; and the income arising from the lease or sale of said school lands shall be distributed to the different townships throughout the State, in proportion to the number of scholars in each township between the ages of five and twenty-one years, and shall be faithfully applied to the specific objects of the original grants or appropriations.

3. The legislature shall make such provisions, by taxation or otherwise, as, with the income arising from the school fund, will secure a thorough and efficient system of public schools in each township in the State.

4. The location of the University of Minnesota, as established by existing laws, is hereby confirmed, and said institution is hereby declared to be the University of the State of Minnesota. All the rights, immunities, franchises, and endowments heretofore granted or conferred, are hereby perpetuated unto the said university, and all lands which may be granted hereafter by Congress, or other donations for said university purposes, shall vest in the institution referred to in this section.

OREGON.

Explored by the Spanish in 1775. Organized as a Territory in 1848. Area, 95,274 square miles. Admitted into the Union in 1859.

POPULATION.

1850..... 12,093 || 1860..... 52,405

The constitution of 1857, still in force, provides in this language for education:

ARTICLE VIII.—EDUCATION AND SCHOOL LANDS.

SEC. 1. The governor shall be superintendent of public instruction, and his powers and duties, in that capacity, shall be such as may be prescribed by law; but after the term of five years from the adoption of this constitution, it shall be competent for the legislative assembly to provide by law for the election of a superintendent, to provide for his compensation, and prescribe his powers and duties.

2. The proceeds of all the lands which have been or hereafter may be granted to this State for educational purposes, (excepting the lands heretofore granted to aid in the establishment of a university;) all the moneys and clear proceeds of all property which may accrue to the State by escheat or forfeiture; all moneys which may be paid as exemption from military duty; the proceeds of all gifts, devises and bequests made by any person to the State for common school purposes; the proceeds of all property granted to the State when the purposes of such grant shall

not be stated; all the proceeds of the five hundred thousand acres of land to which this State is entitled by the provisions of an act of Congress entitled "An act to appropriate the proceeds of the sales of the public lands, and to grant pre-emption rights," approved the fourth of September, 1841; and also the five per centum of the net proceeds of the sales of the public lands to which this State shall become entitled on her admission into the Union, if Congress shall consent to such appropriation of the two grants last mentioned, shall be set apart as a separate and irredncible fund, to be called the common school fund, the interest of which, together with all other revenues derived from the school lands mentioned in this section, shall be exclusively applied to the support and maintenance of common schools in each school district, and the purchase of suitable libraries and apparatus therefor.

3. The legislative assembly shall provide by law for the establishment of a uniform and general system of common schools.

4. Provision shall be made by law for the distribution of the income of the common school fund among the several counties of this State, in proportion to the number of children resident therein between the ages of four and twenty years.

5. The governor, secretary of state, and state treasurer shall constitute a board of commissioners for the sale of school and university lands, and for the investment of the funds arising therefrom; and their powers and duties shall be such as may be prescribed by law: *Provided*, That no part of the university funds, or of the interest arising therefrom, shall be expended until the period of ten years from the adoption of this constitution, unless the same shall be otherwise disposed of by the consent of Congress for common school purposes.

KANSAS.

Area, 78,418 square miles. Organized as a Territory in 1854. Admitted into the Union in December, 1859. Population in 1860, 107,206.

The provision for education in its constitution is in these words:

ARTICLE VI.—EDUCATION.

SECTION 1. The State superintendent of public instruction shall have the general supervision of the common school funds, and educational interests of the State, and perform such other duties as may be prescribed by law. A superintendent of public instruction shall be elected in each county, whose term of office shall be two years, and whose duty and compensation shall be prescribed by law.

SEC. 2. The legislature shall encourage the promotion of intellectual, moral, scientific, and agricultural improvement by establishing a uniform system of common schools, and schools of higher grade embracing normal, preparatory, collegiate, and university departments.

SEC. 3. The proceeds of all lands that have been or may be granted by the United States and the State for the support of schools, and the five hundred thousand acres of land granted to the new States, under an act of Congress distributing the proceeds of public lands among the several States of the Union, approved September 4, A. D. 1841, and all estates of persons dying without heir or will, and such per cent. as may be granted by Congress on the sale of lands in this State, shall be the common property of the State, and shall be a perpetual school fund, which shall not be diminished, but the interest of which, together with all the rents of the lands, and such other means as the legislature may provide by tax or otherwise, shall be inviolably appropriated to the support of common schools.

SEC. 4. The income of the State school funds shall be disbursed annually, by order of the State superintendent, to the several county treasurers, and thereon to the treasurers of the several school districts, in equitable proportion to the number of children and youth resident therein, between the ages of five and twenty-one years: *Provided*, That no school district in which a common school has not

122 CONSTITUTIONAL PROVISION RESPECTING EDUCATION.

been maintained at least three months in each year shall be entitled to receive any portion of such funds.

SEC. 5. The school lands shall not be sold unless such sale shall be authorized by a vote of the people at a general election, but subject to a revaluation every five years; they may be leased for any number of years not exceeding twenty-five, at a rate established by law.

SEC. 6. All money which shall be paid by persons as an equivalent for exemption from military duty; the clear proceeds of estrays, ownership of which shall vest in the taker up; and the proceeds of fines for any breach of the penal laws, shall be exclusively applied in the several counties in which the money is fined, or fines collected, to the support of common schools.

SEC. 7. Provision shall be made by law for the establishment, at some eligible and central point, of a State university for the promotion of literature, and the arts and sciences, including a normal and agricultural department. All funds arising from the sale or rents of lands granted by the United States to the State for the support of a State university, and all other grants, donations, or bequests, either by the State or by individuals, for such purpose, shall remain a perpetual fund to be called the "University fund," the interest of which shall be appropriated to the support of the State university.

SEC. 8. No religious sect or sects shall ever control any part of the common school or university funds of the State.

SEC. 9. The State superintendent of public instruction, secretary of state, and attorney general shall constitute a board of commissioners for the management and investment of the school funds. Any two of said commissioners shall be a quorum.

WEST VIRGINIA.

Area, 23,000 square miles. Admitted as a State in December, 1862.
Population in 1860, 393,234.

The constitution, as amended February 18, 1863, has the following:

ARTICLE X.—EDUCATION.

SECTION 1. All money accruing to this State being the proceeds of forfeited, delinquent, waste, and unappropriated lands, and of lands heretofore sold for taxes, and purchased by the State of Virginia, if hereafter redeemed or sold to others than this State; all grants, devises, or bequests that may be made to this State for the purpose of education, or where the purposes of such grants, devises, or bequests are not specified; this State's personal share of the literary fund of Virginia, whether paid over or otherwise liquidated, and any sums of money, stocks, or other property which this State shall have the right to claim from all persons who may die without leaving a will or heir, and of all escheated lands; the proceeds of any taxes that may be levied on the revenues of any corporation hereafter created; all moneys that may be paid as an equivalent for exemption from military duty; and such sums as may from time to time be appropriated by the legislature for the purpose, shall be set apart as a separate fund to be called the school fund, and invested, under such regulations as may be prescribed by law, in the interest-bearing securities of the United States or of this State; and the interest thereof shall be annually applied to the support of free schools throughout the State, and to no other purpose whatever. But any portion of such interest remaining unexpended at the close of a fiscal year shall be added to, and remain a part of, the capital of the school fund.

SEC. 2. The legislature shall provide, as soon as practicable, for the establishment of a thorough and efficient system of free schools. They shall provide for the support of such schools by appropriating thereto the interest of the invested school fund, the net proceeds of all forfeitures, confiscations, and fines accruing to this State under the laws thereof, and by general taxation on persons or property or otherwise. They shall also provide for raising in each township, by the authority of the people thereof, such a proportion of the amount required for the support of free schools therein as shall be prescribed by general laws.

SEC. 3. Provision may be made by law for the election and prescribing the

duties of a general superintendent of free schools for the State, whose term of office shall be the same as that of the governor, and for a county superintendent of each county; and for the election in the several townships, by the voters thereof, of such officers not specified in this constitution as may be necessary to carry out the objects of this article; and for the organization, whenever it may be deemed expedient, of a State board of instruction.

SEC. 4. The legislature shall foster and encourage moral, intellectual, scientific, and agricultural improvement; they shall, whenever it may be practicable, make suitable provisions for the blind, mute, and insane, and for the organization of such institutions of learning as the best interests of general education in the State may demand.

NEVADA.

Organized as a Territory in 1861. Admitted as a State in 1864. Area, 283,500 square miles. Population in 1863, 40,000.

The constitution (1864) provides for education in these words:

ARTICLE XI.—EDUCATION.

SECTION 1. The legislature shall encourage, by all suitable means, the promotion of intellectual, literary, scientific, mining, mechanical, agricultural, and moral improvement, and also provide for the election by the people, at the general election, of a superintendent of public instruction, whose term of office shall be two years from the first Monday of January, A. D. eighteen hundred and sixty-five, and until the election and qualification of his successor, and whose duties shall be prescribed by law.

SEC. 2. The legislature shall provide for a uniform system of common schools, by which a school shall be established and maintained in each school district at least six months in every year, and any school district neglecting to establish and maintain such a school, or which shall allow instruction of a sectarian character therein, may be deprived of its portion of the interest of the public school fund during such a neglect or infraction, and the legislature may pass such laws as will tend to secure a general attendance of the children in such school districts upon said public schools.

SEC. 3. All lands, including the sixteenth and thirty-sixth sections in every township, donated for the benefit of public schools in the act of the thirty-eighth Congress to enable the people of Nevada Territory to form a State government, the thirty thousand acres of public lands granted by an act of Congress approved July second, eighteen hundred and sixty-two, for each senator and representative in Congress, and all proceeds of lands that have been or may be hereafter granted or appropriated by the United States to this State, and also the five hundred thousand acres of land granted to the new States under the act of Congress distributing the proceeds of the public lands among the several States of the Union, approved A. D. eighteen hundred and forty-one: *Provided*, That Congress make provision for or authorizes such division to be made for the purpose herein contained; all estates that may escheat to the State; all of such per cent. as may be granted by Congress in the sale of land; all fines collected under the penal laws of the State; all property given or bequeathed to the State for educational purposes; and all proceeds derived from any or all of said sources, shall be, and the same are hereby, solemnly pledged for educational purposes, and shall not be transferred to any other fund for any other uses, and the interest thereon shall, from time to time, be apportioned among the several counties in proportion to the ascertained numbers of the persons between the ages of six and eighteen years in the different counties; and the legislature shall provide for the sale of floating land warrants to cover the aforesaid lands, and for the investment of all proceeds derived from any of the above-mentioned sources in United States bonds or the bonds of the State: *Provided*, That the interest only of the aforesaid proceeds shall be used for educational purposes, and any surplus interest shall be added to the principal sum; *And provided further*, That such portions of said interest as may be necessary may be apportioned for the support of the State university.

SEC. 4. The legislature shall provide for the establishment of a State uni

versity, which shall embrace departments of agriculture, mechanic arts, and mining, to be controlled by a board of regents, whose duties shall be prescribed by law.

SEC. 5. The legislature shall have power to establish normal schools and such different grades of schools, from the primary department to the university, as, in their discretion, they may deem necessary; and all professors in said university or teachers in said schools, of whatever grade, shall be required to take and subscribe to the oath as prescribed in article sixteen of this constitution. No professor or teacher who fails to comply with the provisions of any law framed in accordance with the provisions of this section shall be entitled to receive any portion of the public moneys set apart for school purposes.

SEC. 6. The legislature shall provide a special tax of one-half of one mill on the dollar of all taxable property in the State in addition to the other means provided, for the support and maintenance of said university and common schools: *Provided*, That at the end of ten years they may reduce said tax to one-quarter of one mill on each dollar of taxable property.

SEC. 7. The governor, secretary of state, and superintendent of public instruction shall, for the first four years, and until their successors are elected and qualified, constitute a board of regents to control and manage the affairs of the university and the funds of the same, under such regulations as may be provided by law. But the legislature shall, at its regular session next preceding the expiration of the term of office of the said board of regents, provide for the election of a new board and define their duties.

SEC. 8. The board of regents shall, from the interest accruing from the first funds which come under their control, immediately organize and maintain the said mining department in such manner as to make it the most effective and useful: *Provided*, That all the proceeds of the public lands donated by act of Congress approved July second, eighteen hundred and sixty-two, for a college for the benefit of agriculture, the mechanic arts, and including military tactics, shall be invested by the said board of regents in a separate fund, to be appropriated exclusively to the benefit of the first named departments to the university, as set forth in section four above; and the legislature shall provide that if, through neglect or any other contingency, any portion of the fund so set apart shall be lost or misappropriated, the State of Nevada shall replace said amount so lost or misappropriated in said fund, so that the principal of said fund shall forever remain undiminished.

SEC. 9. No sectarian instruction shall be imparted or tolerate in any school or university that may be established under this constitution

NEBRASKA.

Organized as a Territory in 1854. Area, 63,300 square miles. Admitted into the Union March, 1867.

Its constitution has the following article on

EDUCATION.

SECTION 1. The principal of all funds arising from the sale or other disposition of lands, or other property granted or intrusted to this State for educational and religious purposes, shall forever be preserved inviolate and undiminished; and the income arising therefrom shall be faithfully applied to the specific objects of the original grants or appropriations. The legislature shall make such provisions, by taxation or otherwise, as, with the income arising from the school trust fund, will secure a thorough and efficient system of common schools throughout the State; but no religious sect or sects shall ever have any exclusive right or control of any part of the school funds of this State.

SEC. 2. The university lands, school lands, and all other lands which have been acquired by the Territory of Nebraska, or which may hereafter be acquired by the State of Nebraska for educational or school purposes, shall not be aliened or sold for a less sum than five dollars per acre.



VI. EDUCATIONAL REFORM IN SILESIA BY FREDERICK II.

BY JOHN QUINCY ADAMS.

FROM LETTERS ON SILESIA, WRITTEN IN THE YEARS 1800 AND 1801.*

LETTER XLII.—*Schools and Seminaries for the Instruction of Youth in Silesia—System of Education established by Frederick II. upon the recommendation of Felbiger.*

BERLIN, March 7th, 1801.

I HAVE promised in this letter to give you some account of the institutions in the province of Silesia for the education of youth. The university at Breslau and the academy of nobles at Liegnitz I need not mention, having noticed them in my letters at the time when we visited those places. Besides these, there are what we call grammar schools, where Latin is taught in almost every town of the province, and usually in connection with some church or convent. But the arrangements and regulations of the trivial schools, as they are here called—schools destined for that elementary instruction which ought to be diffused over the whole mass of the people—particularly deserve your attention, because you may, perhaps, as a native of New England, entertain the prejudice, that your own country is the only spot on earth where this object is rightly managed, and where the arts of reading and writing are accomplishments almost universally possessed.

Probably no country in Europe could so strongly contest our pre-eminence in this respect as Germany, and she, for this honorable distinction, is indebted principally to Frederick II.; to the zeal with which he pursued the purpose of spreading useful knowledge among all classes of his subjects, and to the influence of his example and of his success even beyond the limits of his own dominions. To enter upon this topic, with the details of which it is susceptible, might, perhaps, not amuse you, and would lead me too far from my subject, I shall, therefore, confine myself to the measures he adopted and the system he introduced in this particular into Silesia.

At the time of his conquest education had seldom been made an object of the concern of governments, and Silesia, like the rest of Europe, was but wretchedly provided either with schools or teachers. In the small towns and villages the schoolmasters were so poorly paid, that they.

* First published in consecutive numbers of the *Port Folio*, Philadelphia, in 1803, and collected and republished in a volume of 387 pages, in London in 1804. The letter on the School System of Silesia was copied, with commendation as an example to the English Government, in the *Edinburgh Review* for October, 1804, and in the *London Quarterly Journal of Education* for January, 1831.

could not subsist without practicing some other trade besides their occupation as instructors, and they usually united the character of the village fiddler with that of the village schoolmaster. Even of these there were so few, that the children of the peasants in general, throughout the province, were left untaught. This was especially the case in Upper Silesia. Frederick issued an ordinance, that a school should be kept in every village, and that a competent subsistence should be provided for the schoolmaster, by the joint contribution of the lord of the village and of the tenants themselves. The superintendence of the schools was prescribed as the duty of the clergy.

But in order that this ordinance might have its due execution, it was necessary to form the teachers themselves properly qualified to give useful instruction. This was effected by the persevering intelligence and zeal of a man by the name of Felbiger, an Augustine monk, belonging to a convent at Sagan; a man, says a Silesian historian, whom a great part of Germany must thank for a revolution, not less important, though of slower progress and milder character, than that which, two centuries and a half earlier, was accomplished by another monk of the same order—by Luther.

Felbiger, after spending some years at Berlin to obtain a perfect knowledge of the best method of instruction practiced in the schools there, returned to Sagan, and made the convent to which he belonged a seminary for young ecclesiastics and candidates as schoolmasters to acquire the knowledge of the improved mode of teaching. Several other institutions of the same kind were, in due time, established at Breslau, Glatz, and other places, upon his principles, and conducted by persons whom he had formed. To defray the expenses necessary for the support of these seminaries, a fund is raised, consisting of one quarter's salary, which every Catholic curate is obliged to pay upon being first settled in a parsonage.

With each of these seminaries are connected certain schools, where the young candidates for the clerical or teaching office are obliged to attend and observe the practice of the method, the theory of which they learn at the seminaries themselves. The clergy are required, no less than the teachers, to go through this process, because the superintendence over the teachers is intrusted to them. No young man can be admitted to either of the offices without an attestation of his qualification from one of the seminaries.

After all these preparatory measures had been carried into effect, an ordinance was published in the year 1765 prescribing the mode of teaching as adopted in the seminaries, and the manner in which the clergy should superintend the efficacious establishment of the system. The regulations of this ordinance prove the earnestness with which the king of Prussia labored to spread the benefits of useful knowledge among his subjects. The teachers are directed to give plain instruction, and upon objects applicable to the ordinary concerns of life; not merely to load

the memory of their scholars with words, but to make things intelligible to their understanding; to habituate them to the use of their own reason, by explaining every object of the lesson so that the children themselves may be able to explain it upon examination. The candidates for school-keeping must give specimens of their ability, by teaching at one of the schools connected with the seminary, in the presence of the professors at the seminary, that they may remark and correct any thing defective in the candidate's method. If one school suffices for more than one village, neither of them must be more than half a German mile distant from it in the flat country, nor more than a quarter of a mile in the mountainous parts. The school tax must be paid by the lord and tenants without distinction of religions. In the towns the school must be kept the whole year round. It is expected that one month shall suffice to make a child know the letters of the alphabet; that in two it shall be able to join them; and in three to read. The boys must all be sent to school, from their sixth to their thirteenth year, whether the parents are able to pay the school tax or not. For the poor, the school money must be raised by collections. Every parent or guardian who neglects to send his child or pupil to school, without sufficient cause, is obliged to pay a double school tax, for which the guardians shall have no allowance. Every curate must examine weekly the children of the school in his parish. A general examination must be held annually, by the deans of the districts, of the schools within their respective precincts; and a report of the condition of the schools, the talents and attention of the schoolmasters, the state of the buildings, and of attendance by the children, made to the office of the vicar-general, who must transmit all these reports to the royal domain offices. From these, orders are issued to the respective landraths to correct the abuses and supply the deficiencies indicated in the reports. This system was at first prepared only for the Catholic schools; but it was afterwards adopted, for the most part, by most of the Lutheran consistories. Its truly respectable author, Felbiger, was, in the sequel, with the consent of Frederick, invited to Vienna by the Empress Maria Theresa, and her son Joseph II., who appointed him director of the normal schools or seminaries in all the Austrian dominions. His regulations have been introduced and are acted upon in almost all the Catholic countries of Germany.

In Silesia they had at first many old prejudices to contend with. The indolence of the Catholic clergy was averse to the new and troublesome duty imposed on them. Their zeal was alarmed at the danger arising from this dispersion of light to the stability of their church. They considered alike the spirit of innovation and the spirit of inquiry as their natural enemies. Besides this, the system still meets resistance from the penurious parsimony and stubborn love of darkness prevailing in some parts of the province. Many villages neglect the support of their schools; many individuals, upon false prettexts, forbear sending their children to school for the sake of saving the tax. The compulsive measures and the

penalties prescribed by the ordinance are used seldom and with reluctance. The benevolent design has not been accomplished to the full extent of which it was susceptible; but as far as it has been accomplished its operation has been a blessing. That its effects have been very extensive is not to be doubted, when we compare the number of schools throughout the province in the year 1752 when they amounted only to one thousand five hundred and fifty-two, with that in the year 1798 when they were more than three thousand five hundred. The consequences of a more general diffusion of knowledge are attested by many other facts equally clear. Before the seven years' war, there had scarcely ever been more than one periodical journal or gazette published in the province at one time. There are now no less than seventeen newspapers and magazines which appear by the day, the week, the month, or the quarter, many of them upon subjects generally useful, and containing valuable information and instruction for the people. At the former period there were but three booksellers, and all these at Breslau. There are now six in that capital, and seven dispersed about in the other cities. The number of printing-presses and of bookbinders has increased in the same proportion.

Dr. Johnson, in his *Life of Watts*, has bestowed a just and exalted encomium upon him for not disdaining to descend from the pride of genius and the dignity of science to write for the wants and the capacities of children. "Every man acquainted," says he, "with the common principles of human actions, will look with veneration on the writer, who is at one time combating Locke, and at another time making a catechism for children in their fourth year." But how much greater still is the tribute of admiration irresistibly drawn from us, when we behold an absolute monarch, the greatest general of his age, eminent as a writer in the highest departments of literature, descending, in a manner, to teach the alphabet to the children of his kingdom; bestowing his care, his persevering assiduity, his influence and his power, in diffusing plain and useful knowledge among his subjects; in opening to their minds the first and most important pages of the book of science; in filling the whole atmosphere they breathed with that intellectual fragrance which had before been imprisoned in the vials of learning, or inclosed within the gardens of wealth! Immortal Frederick! when seated on the throne of Prussia, with kneeling millions at thy feet, thou wast only a king. On the fields of Leuthen, of Zorndorf, of Rosbach, of so many other scenes of human blood and anguish, thou wast only a hero. Even in thy rare and glorious converse with the muses and with science, thou wast only a philosopher, an historian, a poet; but in this generous ardor, this active and enlightened zeal for the education of thy people, thou wast truly great—the father of thy country—the benefactor of mankind.

Yours, &c.

II.—PUBLIC INSTRUCTION IN AUSTRIA.

(Continued from Vol. xvi., p. 352.)

II.—SECONDARY INSTRUCTION IN THE NON-HUNGARIAN PROVINCES.

I.—HISTORY OF GYMNASIUMS.

UP to the time of the Empress Maria Theresa, under whom the present system of secondary instruction was inaugurated, the subjects and methods of teaching in the Latin schools of Austria, as in the schools of the Jesuits everywhere, bore the impress of the "*Ratio et Institutio Studiorum*" of Aquaviva.* In Bohemia and Moravia, under Rudolph II, (1577-1612,) there flourished some thirty Protestant schools, based upon Melancthon's system of classical study,† and under the direction of the University at Prague. Great zeal was shown by the cities of the provinces in sustaining these institutions, and the rectors of the University, from time to time, prescribed the course of study that should be followed. The most noted of these regulations were the "*Schola Zatecensis*" of the learned Jacobus Strabo (1575), the "*Ordo Studiorum*" of Petrus Codicillus (1586), and the rules of 1609, which established five classes and prescribed the grammar of Philip Ramée, the dialogues of Castalian and Vives, the epistles and select orations of Cicero, Ovid's *Tristia*, Virgil's *Æneid*, selections from Horace, Buchanan, and the Greek Testament, with Plutarch and some other historians.

At the abolition of the order of Jesuits there were thirty-seven gymnasiums under their direction in the provinces then belonging to the Empire, of which the oldest was that at Innsbruck. As characteristic of these schools it is scarcely necessary to mention the division of the course into three "grammar" classes, devoted to "the rudiments," "grammar," and "syntax," with some times a preparatory class—two "humanity" classes, for "poetry" and "rhetoric"—and a two or three years' "philosophical" course, in "logic," "physics" and "metaphysics"; the almost exclusive use of the Latin language in both speaking and writing; and the only occasional introduction of "real" instruction in the lower classes, while it was totally neglected in the higher. Great stress has been laid by the defenders of the system of the Jesuits upon the prominence given in the selection of candidates to the order, to their efficiency as teachers; upon the general use and extended study of the Latin tongue; upon the requirement that each member of the order, after two years of university

* Am. Jour. of Ed., Vol. xiv., p. 462.

† Am. Jour. of Ed., Vol. iv., p. 749.

study, should become the teacher of a grammar class, thus supplementing the zeal and devotion of youth to the more mature experience and wisdom of the prefects and masters of the higher classes; upon the usual requirement of three years of service in the instruction of the higher classes before the completion of the theological course; and upon the advantages resulting from the wealth and full endowment of their schools. On the other hand it is asserted that less worthy considerations often governed in the selection of members and in the management of the schools; that "Jesuits' Latin" bore an ill repute among the lovers of pure Latinity, while more accordance was given to the practical use of that language than accords with the spirit of more recent times; that the rules which regulated the removal and change of teachers were such as to make thorough instruction impossible, especially in the philosophical classes; that in these classes the classics and applied mathematics were wholly neglected, and other instruction given only by dictation; and that the amount of instruction was greatly limited by the length of the vacations and the number of holidays. It may at least be asserted, without injustice, that while their schools for a long period answered fully the demands of the times, and were the admiration of even their opponents, yet the stubbornness with which they clung to the forms of scholasticism and humanism, in which their system of instruction originated, showed itself at length unfavorably in the want of originality of thought, in an exclusive fostering of a mere fluency in the use of language, in an utter indifference to the national tongue and to popular enlightenment and culture, and in a fondness for abstract, barren speculation, and a proneness to dogmatism.

During the seventeenth and eighteenth centuries the Piarists also gradually extended their schools from Bohemia into the other provinces, and in 1773 they numbered twenty-four gymnasiums. They were not strictly bound to the plan of instruction adopted by their founder and followed in general the method of the Jesuits, but giving more attention to Greek, German, history, geography, mathematics, and physics. The candidates, after two years' training, were obliged to teach six or eight years in the common schools before a position could be obtained in a gymnasium. It is to the credit of this order that their schools rivaled in efficiency and reputation the institutions of the far more wealthy and powerful order of the Jesuits. There were also a score of schools of a similar grade under the charge of the Benedictine and other religious orders, including one at Roveredo, conducted by lay teachers, and a single Protestant gymnasium, founded at Teschen in 1709.

The attempt to Teschen the Jesuit system may be said to have commenced with the eighteenth century, under Joseph I., who, in 1711, called the attention of the rector of the University to the condition of the philosophical course. A commissioner was appointed by the emperor Charles VI. to propose a plan of reform for the entire University, before whom the Jesuits defended their system as in every respect unexceptionable. The commission made no report, but in 1735 the Emperor issued a decree which for the first

time placed their educational operations under government control, and was intended to promote the introduction of a more judicious and better regulated course of study. The attention of Maria Theresa was drawn to the subject long before her efforts for the improvement of the common schools, and Gerhard van Swieten, previously of Leyden, was selected to guide the reform, who was keen in detecting faults and prompt in applying remedies, but unlike some of his successors, willingly recognized and retained whatever was of value in the existing system. Even during the war of the Austrian succession, (which made more evident than ever before the unity of interest of the several provinces,) the Empress instituted inquiries into the condition of instruction, especially in the Protestant gymnasiums of Bohemia, and as a consequence, in 1747, required that greater attention should be everywhere given to history, Greek, and arithmetic, and to the gradual introduction of German grammar. The vacations were to be shortened, much useless instruction was done away with, and in the philosophical course the study of ethics, politics, and applied mathematics was required. Serfs were to be admitted to the schools only with the consent of their lords, and to still further assure the benefits of the schools to those best able to improve them, scholars of proven incapacity were to be immediately removed. At the same time the attainment of an academical degree was made necessary before entrance upon theological or medical study.

This reform was extended by the more general decrees of 1752, which made the course of study still more prescribed, permitted instruction in the prescribed branches only in the authorized gymnasiums, provided a system of inspection and examination, with semi-annual reports to the imperial government, and required the preparation and use of improved text-books. In 1760, a State Board was formed for the supervision of education and text-books, consisting of Swieten and Archbishop Migazzi, while subordinate boards were formed in the several provinces. These changes were introduced but imperfectly and with great difficulty, though the books for instruction, in the languages especially, were revised and improved. Some of the forms of superintendence were never carried into effect. The provincial boards appointed were at first composed entirely of Jesuits, but the war upon the order by the State, the secular clergy, and many of the other religious orders, had now commenced in earnest, their places were soon filled by others, and their influence at the Universities was rapidly and greatly diminished. Finally, in 1772, the order was entirely abolished, and, as a consequence, the whole subject of gymnasial reform assumed a new aspect. The extensive possessions of the order were appropriated by the State, and the larger portion shortly afterwards was devoted to educational uses, and has since constituted what has been usually styled the "Educational Fund." The gymnasiums of the Jesuits thus became endowed State institutions. But the Empress deemed it advisable that their number should be somewhat diminished,

both on account of the want of teachers, which could not otherwise be remedied but by the appointment of ex-Jesuits, and for the purpose of procuring means, even at the expense of the gymnasiums, for the improvement of the common schools. Another prominent motive was the fear lest agriculture, trade and commerce should suffer if the facilities for entering upon literary pursuits were too great. A number of the more incomplete and poorly endowed institutions were accordingly gradually suppressed, amounting in all to thirty-two, and embracing some that had not belonged to the Jesuits.

The necessity, however, for a more complete and uniform organization of the schools that remained was no less urgent than before. The State Board of Education, temporarily suspended in 1772, upon the death of Swieten and resignation of the Archbishop, who was opposed to many of the proposed changes, was revived in 1774, with Kressel as president, and required to report a plan of reform for all the educational institutions of the Empire, including common schools, gymnasiums, convent schools, academies, and universities, and giving special consideration to the question of the general use of the German language in instruction. A partial report, giving a plan of study for the "philosophical" course, drawn up by Martini, was made, and received the approval of the Empress during the same year, and provision was made for the introduction of the revised course in the University at Vienna, and as soon as possible in the other universities and convent schools. The question of gymnasial reform, however, was not so easily decided, and occasioned hot dispute between two opposing parties—the one favoring the system of the Jesuits, the other desiring to introduce a course and method similar to those which years of trial in the more advanced German States, especially in Prussia and Saxony, had proven so excellent and advantageous. Prominent among the plans proposed by the latter party was one advanced by Prof. Hess, of the Vienna University, which regarding the gymnasiums as institutions chiefly for general instruction, preparatory to higher scientific study, still retained Latin as the principal branch, but added to it a judicious and somewhat extended course of Greek and German study, mathematics, history, and natural science—the whole wrought out with much minuteness of detail. Martini recognized its many excellencies and warmly recommended it to the approval of the State Board, and after being modified by Hess in some of its wider deviations from the existing system, it was reported by them to the Empress, and by her referred to her principal ministers for their opinions. But the idea that a gymnasium should not have an exclusively philological character had not yet gained general favor, and while many experienced schoolmen received and sustained the projected change with enthusiasm, many others prominent in the government were as violently opposed to it. The Empress finally appealed to Gratian Marx, then principal of the Savoy Ritter Academy, who laid before a special Educational Board a plan which was approved by

them, and shortly afterwards, (October, 1775,) received the imperial sanction.

This system of Marx was fashioned upon the model of the Piarist institutions, in which, through the concerted action of the principals, various changes and reforms had been made as early as 1763. But beyond stricter regulations respecting the qualifications for admission, the semi-annual examinations and classification of the students and the removal of such as were found incompetent, the requirement of a thorough knowledge of Latin and its use in both speaking and writing on the part of all students intended for the university, and special provision for the supervision of the gymnasiums in the several provinces, the changes in the course of study were made only gradually as proper text-books were prepared, and were still incomplete at the death of the Empress in 1780. In the three grammar classes, the principal aim was still to speak Latin with correctness, to which was added a slight knowledge of Greek and some instruction in arithmetic, geography, and history, with the catechism. In the two humanity classes, all the instruction in the languages was given wholly in Latin, and admission and promotion depended upon the proficiency of the scholars in its use. Additional teachers were here provided for instruction in Greek, and though the standing of the students was not effected by their proficiency in this language, no premiums could be gained without satisfactory progress in it. Increased attention was to be given to mathematics, history, and geography, and as was previously the case, admission to the philosophical course depended upon the result of an examination in the studies of the gymnasium. No children of the class of serfs could be admitted to these classes, even so late as 1804, without permission from the public authorities.

But Joseph II., notwithstanding all that was done by him for the benefit of the common schools, had but little sympathy with many of the plans of gymnasial reform. The idea of Hess, that the gymnasiums should be made institutions for laying the ground-work of a general education, seemed a dream that was impossible to be realized. Their proper aim appeared to him rather to be the education of capable civil officers, the inculcation of "morality,"* and the imparting of such instruction as was most immediately and practically useful. The legislation of his reign was chiefly confined to general instructions to directors and teachers in relation to text-books, and a single ordinance upon the subject of instruction and discipline. The practical acquisition of the Latin language was made the principal object, the secondary branches being left in a great measure to the pleasure of the individual teachers. The course and amount of instruction were carefully regulated and none but the prescribed text-books were permitted, to the exclusion of the many manuscript works in

*The term "morality," as often used in this connection, does not convey at once to the American mind its true, prominent idea, implying, as it does, a habit of obedience to constituted authority, and compliance with law, which makes its inculcation a matter of supreme political importance.

which teachers had, too often to the detriment of their pupils, shown off their learning or self-conceit. Corporal punishment was prohibited and a system of rewards and punishments substituted, by means of records of merit and demerit, seats of honor and disgrace, and various similar methods of appeal to the sensitiveness of the scholars. Private meetings and societies of students, of a religious character, were forbidden, and regular attendance upon public worship, daily mass, catechetical instruction, &c., was made obligatory. The philosophical classes were also re-organized, the only essential reform being the substitution of the German language for the Latin, till this time exclusively used in instruction. Upon the whole, the character and efficiency of this higher department, under the influences bearing upon it, had deteriorated. In addition to these regulations, Greek was afterwards made so far obligatory upon the university classes that even the lowest grade for certificate could not be obtained without satisfactory progress in it. Hitherto, instruction in the gymnasiums had been gratuitous, and aided by the religious orders many had attended who afterwards found it difficult to sustain themselves through a course of university study. To discourage the attendance of such students, and also to increase the number of stipends, tuition fees were now exacted, varying from twelve to eighteen florins in the different gymnasial and philosophical classes, and the amount thus raised was added to the fund from which stipends were granted to students designed for the university. At the same time, the "seminaries" and boarding schools (*convicts*) were abolished, and their property added to the same fund. The establishment of private institutions was discouraged and valid certificates could be granted only by the gymnasiums, on which account their semi-annual examinations were open to private pupils. It soon, however, became evident, even to the government, that these schools were not fulfilling their object, and the more that no means were provided for the training of their teachers. Simply to pass the semi-annual examinations became the sole purpose for which the pupils studied, and discipline disappeared as its religious foundation was swept away by the rationalistic tendencies of the times. The party that had opposed the Emperor's reforms, especially in religious matters, called attention to these evils, and memorialized the throne for their reform. The Emperor himself acknowledged the force of these complaints, and only a few days before his death, (February, 1790,) appointed a commission to report a plan for the more perfect organization and gradation of the gymnasiums and higher schools. His successor, Leopold II., to whom the complaints were renewed, entrusted the reform to Martini, already president of the commission appointed by Joseph. Martini's plan, which went into effect in October, 1790, consisted in the formation of a "Teachers' Association" in each university department and in each gymnasium, which should have control of the instruction in their institutions, subject to the general direction of the "Educational Session" in each province, which was in turn subject indirectly to the higher school officials. Some provision was

made for the supply of more capable teachers, but the details of the plan upon these and other points, instruction, discipline, &c., are of the less importance as it was never carried but imperfectly into operation.

Emperor Francis succeeded Leopold II. in 1792. He favored the peculiar views of his minister, Rottenhann, who recognized the superiority of the gymnasiums of Protestant Germany, and recommended an examination of them and of the public schools of England. But in his opinion the higher speculative and historical branches of the philosophical course should be placed as far as possible out of general reach, and their pursuit by those who intended to engage in the practical business of life, and who could not hope to acquire a thorough understanding of them, should be discouraged as dangerous. Ordinary men should be content with the studies of immediate use to them and with received rules and principles. Prominence should therefore be given in the philosophical classes to mathematics and the natural sciences, while the instruction in history should be conducted with great care and judgment, to avoid conveying dangerous impressions and erroneous ideas, and a complete course of philosophical study should be established at only two or three of the universities. The correctness of these opinions was immediately questioned and warmly discussed by the Board of Educational Reform, which was appointed in 1795, and the debate was continued until interrupted for the consideration of the special reports upon the different classes of institutions, made by the individual members of the Board. The report upon gymnasiums was drawn up by I. F. Lang, principal of one of the Vienna schools, and of high reputation for scholarship and success in teaching. Rottenhann submitted a plan for a "lyceal course," as a substitute for the philosophical classes, and as intermediate between the gymnasial course and a course of true philosophical study. Reports upon instruction in special branches were also made by Gerstner, of the Prague University, by Mumelter, of the Vienna University, and others.

The final report of the Board was not made until 1799, and some time passed before any decisive measures were taken. In 1802, the Teachers' Associations, which had become very unpopular, were abolished, and the previously existing offices of superintendent of gymnasiums and of the higher departments, were restored. Lang was appointed to the former position. Meanwhile several ordinances were issued, designed to aid the enforcement of stricter discipline, and to foster a proper religious feeling, in opposition to the infidel tendencies of the age. Every gymnasium was required to have a catechist, by whom two hours of religious instruction should be given weekly, and his good report was essential to promotion to a higher class or to the holding of a stipend. Attendance at mass and at religious worship was strictly required, the conduct of pupils, even out of school hours, was under supervision, and their progress in school was encouraged by frequent reviews and examinations. Record was to be kept of the conduct and standing of each pupil, which at the completion

of his studies should be returned to the government and have decisive weight in the making of official appointments.

The first general measure of reform, differing in many respects from that proposed by Lang, was adopted in 1805. By this the number of classes in the higher gymnasiums was increased to six, and there were required to be as many teachers as classes, each strictly confined to instruction in a single branch. The hours of study were limited to eighteen in the week, half which were devoted to Latin throughout the course. Three hours were given to geography and history, two to mathematics, and the remaining two to natural history and physics in the three lower classes, and to Greek in the higher. The speaking of Latin was again strictly insisted upon in the third and higher classes. The students were to be graded according to conduct and proficiency into three divisions, by which promotion from one class to another should be governed, and at each semi-annual examination prize books were to be awarded. No private tutor or teacher could give instruction in the studies of the gymnasium without the permission of the prefect, (except country pastors in the aid of poor boys,) and private pupils in gymnasial towns were required to pay the tuition fees, to be present at the monthly examinations, and to pay an annual examination tax. A number of improved text-books were speedily issued, with detailed instructions and judicious advice respecting their use, for such as having been class teachers were least prepared to act as department teachers.

In 1808, all the regulations respecting study, instruction and discipline were gathered into a "gymnasial code," thus completing the organization of these schools, as the "School Constitution" had done for the common schools. The superintendency beyond the provincial capitals was committed to the officials of the circles—the subordinate supervision of the religious gymnasiums to the principals of the orders, and of the remainder to suitable members of the clergy. The director in each capital was also superintendent of gymnasial instruction throughout the province, and the one at Vienna was the referee for the gymnasial system in the State Board of Education, which had been re-established. By Lang's indefatigable exertions, the hitherto insufficient salaries of the teachers were raised, notwithstanding the unfavorable condition of the State finances, and amounted now to 5-800 florins, which resulted in drawing not a few able teachers from the legal profession.

A re-organization was at the same time being effected in the philosophical course, which was limited at the lyceums to two years and included only the most essential branches, but at the universities was extended to three years and afforded thorough philosophical instruction. The obligatory branches were religion, giving a more doctrinal basis to what had previously been taught historically,—philosophy, embracing psychology, logic, metaphysics, and moral philosophy,—elementary mathematics, physics, and general history. The instruction in philosophy, mathematics, and physics was given in Latin, while some attention was also given

to Greek. Two years study only was required of theological students, the third year being for those intending a full university course. The study of physiology was required of those designed for the medical profession, and of Austrian history of legal students. The optional studies were æsthetics, with reference particularly to German literature, history of the arts and sciences, pedagogy, practical geometry, agriculture and technology, to which a fourth year could be given. Full liberty was given for the study of diplomacy, the higher mathematics, astronomy, the modern languages, &c. The text-books were prescribed, and the examinations and gradation of the students as at the gymnasiums. The salaries at the lyceums were 800-1,000fl., at the universities 1,000-1,200fl., at Vienna 1,100-1,500fl., (afterwards raised to 1,500-2,000fl.)

Vacant teacherships, when under the control of the State, were open to competition, and the choice determined by an examination of the candidates. The first attempt at the special instruction of teachers was made at Vienna in 1809, but unsuccessfully. In 1811, two assistant teacherships were established with the same design at the university gymnasiums, and also in connection with the philosophical classes at Vienna and Prague.

The number of the gymnasiums had, during this time, gradually increased, owing to the efforts of the religious orders to thus strengthen themselves and at the same time remedy the prevalent scarcity of candidates for the priesthood, many communities also showing a willingness to contribute freely for the establishment of new schools, or the restoration of those that had been suspended. Upon the re-establishment of the Austrian monarchy, after the fall of Napoleon, the gymnasial system of Austria was extended to Salzburg, Carniola, the Littorale, Tyrol and Vorarlberg, and Dalmatia. Some time was found requisite for the re-organization of the schools of Tyrol and Dalmatia, and yet more for that of the gymnasiums and higher schools of Lombardy and Venice. In 1818, philosophical departments existed in connection with the three universities at Vienna, Prague, and Lemberg, and at eight lyceums in as many different provinces. There were also twelve "philosophical schools." The number of gymnasiums was eighty-two, of which twenty-five were in Bohemia, nine in Moravia, eight in each of the provinces of Lower Austria, Tyrol; and Galicia, five in Styria, four in Silesia, three in Dalmatia, while Upper Austria, Carinthia, Carniola, the Littorale, and the Frontier had each two, and Salzburg and Bukowina had each one.

Though the rigidly enforced adherence to the prescribed text-books and to the regulations respecting the extent and distribution of lessons tended to make instruction mechanical on the part of both teacher and scholar, yet much was effected through the labors of the more faithful teachers. But after the peace that relieved the Empire from its struggles with its foreign enemies, a successful effort was made to effect a retrograde movement, and to return gymnasial instruction to the position which it held in the days of Maria Theresa. Everything that favored progress in educa-

tion it had become customary to denounce as revolutionary, as protestant and hostile to the church, as Prussian and dangerous to Austria. In 1815, Francis had already taken measures to this end, and in 1818 the system of class teachers was restored and in the following year the time given to instruction in Latin was increased at the expense of that in geography and history, while natural history and physics were wholly omitted. The system of class teachers, already proven inefficient when it made less extensive demands upon the abilities of the teachers, could but decidedly increase the mechanical character of the instruction given, few having a satisfactory capacity for teaching more than one branch and beyond this but a mere understanding of the contents of the text-books in other branches. An improvement in the text-books now became a prime necessity, but they were left untouched, notwithstanding, too, the great advances that had been made in philological and other sciences. The spirit of alienation from the rest of Germany was producing its legitimate fruits.

In 1820, it was further proposed to limit the philosophical course to those branches most necessary as preparatory for the higher departments. In 1824, this change was effected and the course reduced to two years, to which a third could be added for the optional branches. Instruction was mostly given in German, (or Italian in Lombardy and Venice,) and with the new text-books that followed, the connection between the gymnasium and the philosophical course was wholly severed, and the latter burdened with an amount of mathematics and philosophy for which the lower classes gave no preparation. By this a restriction was laid upon the number of students preparing for the universities, more effectual than all previous ordinances, though other less prominent measures had a tendency to the same result. Not more than forty per cent., upon an average, of those who entered the philosophical course completed the second year's studies. There were, indeed, institutions that were less strict, but their reputation was low, and the discipline exceedingly loose. But even in the better institutions, discipline was more or less defective, and only personal influence or despotic severity on the part of individual teachers could govern the unruly crowds of the lecture hall.

This condition of things was sufficient, even under the political restraints of that day, to arouse a number of the friends of education to an earnest struggle against it. The most noteworthy of the articles published by these men in 1828 were those of Professors Baumgartner, Ettinghausen, and Ficker, complaining of the compression of the entire study of geometry and physics into three semesters of the philosophical course, of the subordinate position of Latin philology and complete neglect of Greek philology, and of the degraded position of natural and general history. The government, indeed, had never had very strong confidence in the continuance of the new plan of philosophical study, which had been approved at first for only four years, but though these opposing views were received and listened to by the still existing Reform Board, yet no

action was ever taken upon them. It was not until 1837, the third year of the reign of Ferdinand I., that Hallaschka, then superintendent of philosophical studies, could again broach the question of reform. He urged the re-establishment of the three years' course, at least in the higher institutions, and, in general, a return as far as possible to the plan abandoned in 1824, but still retaining German (and Italian in Lombardy and Venice,) as the language of instruction. This was not wholly without result. In 1838, an examination was made into the condition of the gymnasia, and an expression of opinion as to their improvement was required from all the gymnasial and philosophical directors, prior to any change in the philosophical studies. The opinion in favor of a thorough reform was unanimous, the chief defects being that attention was principally given to the Latin grammar and too little to the means of higher training to be found in a more comprehensive reading of the classics, that the speaking and writing of this language were taught very inefficiently, that the limitation of Greek merely to the grammar made it very distasteful to the pupils, that the instruction in mathematics laid no sufficient basis for the requirements of the first philosophical year, that more stress was laid throughout upon memorizing than upon mental apprehension, and that success was made yet more difficult by the want of any institution for the special training of teachers, by the deficiencies of the old textbooks, and by the over-crowding of the classes.

These views and the accompanying plans of reform were submitted to an able commission appointed in 1841, whose report, in which many of the proposed changes were approved, was received and for the most part accepted by the State Board of Education, but still no measures were taken for carrying them into execution. In 1844, the same commission were called upon for a second expression of their views, who in reply reiterated and defended their former positions. This report, however, gave rise to a discussion of the expediency of a general introduction of the department system of teachers, and induced an inquiry in reply to which three professors of the Vienna and as many of the Prague philosophical department gave an essentially unanimous opinion in its favor. The Board of Education in 1845 fully approved the report of the commission, but limited its action to a reduction of the weekly lessons to eighteen, seven of which were given to Latin, two each to religion, mathematics and German, two to geography and history, one to physics, and two in the four higher classes to Greek. A second commission had at the same time been appointed for the revision of the plan of philosophical study, who adopted essentially the proposition already made in 1837, going back to the system that had been laid aside in 1824, but insisting more decidedly than that had done upon the close connection that should exist between the obligatory philosophical course and the gymnasial studies. The necessity for reform found expression finally also in the press, even under the restrictions of the censorship. But the various projects thus advanced from all sides remained without result till in Octo-

ber, 1847, the distinction of three upper and three lower gymnasial classes was generally allowed, as well as the drawing up of new rules of discipline, and by way of trial the introduction of the reformed plan of gymnasial study, (but with class teachers and a department teacher of mathematics and physics,) was permitted for six years in Vienna, Prague, Lemberg, and Milan. The political revolution of the following year was more radical and more prompt in its operation.

There were at this time in the Empire (not including Lombardy and Venice,) philosophical classes at six universities, five lyceums, and fifteen philosophical schools. The number of gymnasiums was eighty-three. The number of students attending the gymnasiums was 19,657 in 1828, 18,567 in 1838, and 21,612 in 1847, among whom are included 1,597 private pupils. In the same year the number of students pursuing the obligatory philosophical course was approximately 4,770. In Lombardy and Venice, besides the fourteen imperial gymnasiums, there were thirteen communal, twenty-two episcopal, seven "convicte," and eight private gymnasiums, three gymnasial institutes, and twenty-one gymnasial schools. Only the first two classes can be considered as wholly and the next two as partially public institutions, and hence of the 15,540 pupils, 4,426 were private scholars. So the philosophical schools were divided into twelve public, twenty-one episcopal, sixteen convent, and twenty-six private institutions, the pupils in the public and episcopal schools numbering 3,276.

The results of gymnasial instruction up to this time have already been sufficiently indicated, their strongest condemnation being found in the pleas for reform continually urged by the highest educational authorities. In the political revolution that now occurred, rejuvenated Austria found no branch of public instruction so ripe and ready for successful re-organization as the gymnasiums. Feuchtersleben, in his "Outlines of a System of Public Instruction," laid down as the object of the gymnasium an advanced general education, using as a principal means the ancient languages and their literature, annexing to it the philosophical course, and for this purpose making the number of classes eight. The distinction of the upper and lower gymnasiums he based upon the essential difference of instruction in each, giving class teachers to the one and department teachers to the other. The subjects of instruction he made nearly the same as had been settled upon in the previous discussions and reports.

But the most efficient agent in the re-organization of the intermediate schools was Exner, ministerial councilor. Acting when revolution and rapid change were the order of the day, the incorporation of the philosophical course into the gymnasiums located wherever philosophical classes had previously existed, was decreed in August, 1848. The addition of similar classes to other gymnasiums was left to the choice of the communities, but instruction in German and in natural history was introduced into all gymnasiums. This change began with the school year in 1849. The bestowal of the professorship of philology at Vienna upon

Hermann Bonitz, brought to Exner's aid one who united unwonted acuteness and genius for systematizing with an intimate knowledge of the intermediate schools and their wants. From their united exertions sprang the "Plan for the organization of the gymnasiums and real schools of Austria," which was published by the Ministry of Instruction, 16th Sept. 1849. It is necessary here only to indicate the essential points of the reform thus inaugurated. The philosophical course was separated entirely from the higher department and united with the humanity classes to form the "upper gymnasium," from which the "lower gymnasium" was distinct in gradation, serving as a preparatory department in all branches. The gymnasium should afford all the means necessary for attaining a general advanced education, combining thorough mathematics and scientific instruction with philological training and the study of history, the main difficulty being to unite harmoniously the instruction in all the different branches. The board of teachers was made the primary organ of administration; the director, taking the place of the former local director, vice-director, and prefect, became responsible for the uniformity and firmness of the management, and also took part in instruction. A medium was devised between the systems of class and department teachers, by dividing the branches of study into groups in the examination for teacherships, creating the class "ordinarius" as the center of union of each class, and having a classification of the scholars under each study, as well as a general class gradation. Competitive examinations for teacherships were abolished. The hours of study were from twenty-two to twenty-six in a week. The purposeless reading of poor Latin, and the previous waste of time upon poetry and rhetoric, gave place as far as possible to the extended reading of classic authors, while more time was given to Greek, and the claims of the German and of the several provincial languages received full consideration. The study of geography was mostly united with that of history, which was both biographical and chronological in its character. Metaphysics and moral philosophy were deemed suited only to a riper age and the fuller preparation of the university. In the discipline all pupils were upon a common footing, the higher classes holding a different position only as far as would naturally follow from their more advanced age. The eight years' course was closed by a "maturity examination," which was made essential to admission to the universities, and aside from the requirement of this examination the State renounced control of every kind over private instruction in the gymnasial branches.

The energy with which this plan was carried into speedy operation is eminently due to Count Thun, who entered upon this service with an especial predilection, while remarkable efficiency was also shown by the provincial authorities. In 1850, the philosophical classes that had hitherto existed at the universities, lyceums, and philosophical schools, were wholly merged in the gymnasiums, and communities, corporations, and

individuals aided liberally in forming these classes in other places, and in the endowment of new institutions. Seminaries for the training of teachers were shortly opened at Vienna, Prague, Lemberg, Parvia, and Padua, and considerable appropriations were granted for the aid of aspirants to teacherships. To insure uniformity in carrying out the new system of instruction and an interchange of opinions among the teachers, conferences of directors and teachers in all the provinces were encouraged, and chiefly through the exertions of Bonitz a journal devoted to the interests of the gymnasiums was established.

The new organization did not include instruction in religion. Negotiations were entered into by the Minister with the convention of Bishops assembled at Vienna in 1849, and it was agreed that this instruction should be under the direction of the bishops in their respective districts. The old text-books in all branches were at once removed, the bishops discarding also those that had been used in religious instruction, and though the principal dependence was necessarily at first upon books of foreign production, yet measures were immediately taken for the composition and publication within the Empire of suitable text-books of every grade. Moreover, for the furtherance of gymnasial reform, school statistics were found to be an indispensable need, and were taken in hand simultaneously by the Gymnasial Journal and the statistical bureau.

In 1753, Exner fell a sacrifice to his excessive labors, leaving his work still incomplete. His place was supplied by Kleemann. Increased consistency and completeness were gradually given to the new system by additional enactments, and on the 9th of December, 1854, it was decisively approved. To this were added regulations respecting the official rank of teachers, and in 1856 the final law upon the examination of candidates for teacherships.

There was of course no want of violent opposition to the new order of things. A considerable portion of the clergy and of the higher officials sympathized with those who favored an exclusively Austrian nationality. Loud complaints were continually arising of the complete supplanting of the old by the new, of a disposition to favor whatever was of foreign origin, and systematic attempts at Germanization, of the overburdening of the pupils, of the neglect of religious instruction, of a deficiency of Latin instruction, and of the severity of the maturity examination. The Ministry of Instruction opposed with determined earnestness the efforts of the national party, and even went so far beyond the early plan of reorganization as to make the German language an obligatory study at all gymnasiums and the prevalent language of instruction except in Lombardy and Venice. But on the other hand the views of the ministry coincided in many respects with the other demands of the opposition, and subsequent enactments indicated a wavering of purpose in regard to the plan of studies and its operation. This attitude of the government towards its own work was not without its influence upon the agents ap-

pointed for its execution, and from official circles complaints began to arise of the unsatisfactory results of the system. The seminaries, indeed, were actively engaged in their duties, the Journal ably investigated various important questions, and school literature grew in compass and in depth, but many faults in the carrying out of the system, which in the zeal of earlier years had been overlooked, now excited attention and became an element of strength to the opposition.

In 1857 the Ministry of Instruction published a series of proposed modifications, and required the Gymnasial Journal to open its columns to a discussion of their merits. The proposals, however, as a whole, found but a single defender, the many remaining writers agreeing that the changes in view would prove substantially an overthrow of the existing system, making the lower gymnasium for the most part a mere Latin school, and removing it from its position as preparatory to the higher, thus again burdening the latter, as the philosophical course had been before, with the whole weight of real instruction, to the certain deterioration of the classical studies. These views were emphatically sustained by other members of the press, and as at the convention of the philologists and schoolmen of Germany, held at Vienna in September, 1858, the weight of their authority was thrown in favor of the existing system and of the assimilation of the Austrian school system to that of Germany, it was continued in operation as before. The only important ordinance of the last year of Thun's ministry, (1859,) again removed from all but the State gymnasiums the prescription of German as the language of instruction in the higher classes.

With the new life that had now been infused into all the relations of the Empire, redoubled activity was shown in multiplying the number of gymnasiums, without aid to any great extent from the State treasury. The number of scholars increased from year to year in all the provinces, notwithstanding the strong feeling in favor of real schools, the increase from 1857 to 1860 being 25 per cent., while that of the population was but 2.8 per cent. The Gymnasial Journal labored on vigorously, and a second journal was established in the interests of the gymnasiums and real schools. The dissolution of the Ministry of Instruction in 1860 was accompanied by rumors of intended changes, which disappeared upon the appointment of Schmerling to the position that had been occupied by Thun. The first session of the representative branch of the government (August, 1861,) brought an unexpected assault from the extreme national party in a motion that the lower gymnasium be changed to a burgher school with class teachers, and a substitution, as far as possible, of the national language for the classical, while the upper gymnasium should be changed to a scientific lyceum, and the maturity examination be abolished. The futility of these changes was conclusively demonstrated by Hochegger and Bonitz, and no action was taken upon the motion by the *Reichsrath*. The extreme realistic and utilitarian views of the opposition have since

found expression again and again, but with the majority they have met with no sympathy, and when in the autumn of 1863 a strong effort was made for a closer approach of the gymnasium and real school, it was made evident to all that the existing system had become firmly established and was to be sustained—a result which can not fail to favor increased activity and advanced educational development.

II.—PRESENT ORGANIZATION OF THE GYMNASIUMS.

Essential Distinctions.—The gymnasiums of Austria are *complete* or *incomplete*—the former having all the eight classes of the higher and lower gymnasiums; the latter only the four classes of the lower gymnasium, preparing for the higher gymnasium, but also having a certain degree of completeness and sufficiency in its own course. The number of complete gymnasiums is eighty—of incomplete, twenty-six. These are all “public” institutions, *i. e.* the certificates granted by them are recognized as legally valid. Such as are sustained exclusively or in a great part from the Educational Fund are known as “State” gymnasiums, and of these there are fifty-eight. Many belong to religious orders and receive nothing, or but small appropriations, from the State. Thus the Pi-arists have sixteen; the Benedictines, nine; the Franciscans, five; the Premonstratensians, three; the Jesuits, three; the Cistercians, two; the Augustinians, two; the Greek-Catholic Basilians, one; and the orthodox Greeks one. The title “Imperial Royal” is borne by nearly all. All also have a confessional character, 103 being Catholic, 1 Evangelical, and 2 orthodox Greek.

As respects the language employed in instruction, the rule prevails that the one with which the students are most familiar, and which is best suited to their general education, shall be employed. Until 1859 the German was prescribed except in the gymnasiums of Lombardy and Venice, but through the peculiar relations of the Hungarian provinces a change was then induced and this requirement is not adhered to in districts whose population is mostly other than German. The German is exclusively used in Upper and Lower Austria, Salzburg, Styria, Carinthia, Northern Tyrol, Vorarlberg, and Silesia, and at some gymnasiums in other provinces. Religious instruction may, however, be given in another language to the non-German students, during the whole or a part of the course. The gymnasiums of Lombardy and Venice, almost without exception, and some others, make exclusive use of Italian. In a few schools the classes are divided for distinct languages, and, in fact, much diversity exists in the manner in which the different languages are employed in different branches and different classes.

Supervision and Administration.—The State Ministry of Worship and Instruction has the supreme supervision over all the gymnasiums. It grants the right of bestowing certificates, permits the establishment of

new State gymnasiums, appoints the regular teachers and nominates the directors of State gymnasiums, and confirms the directors and teachers in other public institutions. It proposes all legislative measures for the action of the national council and decides in all educational matters relating to several provinces, and upon the more important questions gives regulations for single provinces or gymnasiums. It approves the course of study and rules of discipline of each institution, authorizes text-books, appoints boards for the examination of teachers, and has a voice in the appointment of the educational referees of the provinces. In all matters the State Ministry acts with the advice of the "Council of Education," whose gymnasial department consists of six members residing in Vienna, (three university professors, a director, and two gymnasial teachers,) to whom are made the reports of the gymnasial inspectors, of the examining boards, and of the Teachers' Seminaries, and who have the initiate in all matters relating to instruction.

Communication between the State Ministry and the gymnasiums is made through the provincial authorities, to whom are committed many matters of minor importance and from whom appeal may be made to the Ministry. The "Educational Referee" of the province is also referee for gymnasial affairs, and with him is associated the "Gymnasial Inspector," who regularly visits the gymnasiums of his province every year, investigating their condition and aiding their advancement so far as his authority permits. The ecclesiastical authorities have no concern in the administration of the gymnasiums beyond the right of the episcopal commissioner to be present at instruction and at the examinations, and to obtain all desired information from the director. The same is true of the committees appointed by the communities, who serve to make mutually known the wants and wishes of the gymnasiums and the communities in which they are located and to facilitate the cooperation of the gymnasium with private instruction. The immediate administration of the affairs of each gymnasium rests with its board of teachers.

Grades and Duties of Teachers.—The "board of teachers" at any gymnasium includes all engaged in instruction, both teachers and assistants. The "regular teachers" are those that have charge of the obligatory branches, while those engaged in the optional studies are designated as "associate teachers." The director is chosen from among the regular teachers and continues to take part in instruction, the remainder being in every respect equal in rank. Including the director there are at a complete gymnasium eleven regular teachers, and at a lower gymnasium, five—beside the catechist, who may also be employed in some of the obligatory branches. Where parallel classes exist, the number of teachers may be increased. All are employed as department teachers, but one is designated for each class by the director as "class teacher," or "ordinarius," to whose special guardianship the class and its interests are committed. He therefore holds occasional conferences with his colleagues upon the arrangement of the studies and upon the progress and behavior

of the students, reviews all the written exercises of his class, and is the representative of the students and their parents before the school authorities.

The director is the proper representative of the gymnasium, conducting its correspondence and primarily responsible for the prosperity of the institution, and hence obliged to become intimately familiar with all its exercises and concerns. He presides over the meetings of the teachers, which are held regularly each month and on other occasions as found necessary, and are attended by all the teachers and assistants of the obligatory branches—the latter voting only upon questions relating to their own pupils or subjects of instruction. The associate teachers also attend the meetings for determining the classification of the students and the preparation of the annual report. The director has the right, in pressing cases, of acting upon his own authority and contrary to the decision of the teachers, being responsible to the provincial authorities. He alone decides upon the branches to be taught by the several teachers, though their wishes are consulted and put upon record. A meeting of the teachers is also called by the gymnasial inspector at his annual visit, in pursuance of the duties of his office.

The number of regular teachers has increased from 737 in 1851 to 1,006 in 1863, and the associate teachers from 202 to 273—the assistants falling from 358 to 351. These changes were due chiefly to the establishment of new gymnasiums, the formation of parallel classes, the substitution of regular teachers for assistants, &c. Fifty-nine directors are ecclesiastics, but the appointment of such at gymnasiums not belonging to the religious orders has already become the exception. Two of the complete gymnasiums have three catechists each, and thirty-eight have two. Of the remaining regular teachers, 327 are ecclesiastics—of the assistant teachers, 123—and of the associate teachers, 22. Even the religious gymnasiums are often compelled to employ laymen as assistants, and much more frequently as associate teachers.

Appointment of Teachers; Salaries and Pensions.—The conditions requisite to the attainment of a teachership, are Austrian citizenship, the age of forty years, fitness for teaching in the proposed grade of office, and unimpeachable morals. The first two conditions may be in some cases dispensed with. Members of a religious order must have the consent of their superior, and relatives of a director within the third degree of consanguinity cannot be appointed to the same gymnasium. Regular teacherships at a religious gymnasium are filled by the superior of the order, and at other gymnasiums generally by the State Ministry after publication for applicants. The Ministry has also the confirmation of all other appointments, upon nomination through the provincial authorities. The catechists are appointed by the bishop, after examination. Assistant and associate teachers are appointed by the directors and confirmed by the provincial authorities. The appointments of all regular teachers are not made permanent until after three years of probationary service. The

directors belong to the eighth, the other teachers to the ninth grade of official rank.

The incomes of the regular teachers of the complete State gymnasiums consist—(1.) of the salary, as to which there are three grades of gymnasiums, with salaries of 1,050 fl., 945 fl., and 840 fl. respectively, diminished 105 fl. for that half of the teachers for the shortest time in service—(2.) of the decennial increase, amounting to 105 fl. for each ten years of service from the date of appointment—and (3.) of a share of the tuition fees, amounting since 1864 to fifteen per cent. of one third of the fees for the six oldest teachers, and ten per cent. to the seventh. At the Vienna gymnasiums the salaries are somewhat larger. At the lower gymnasiums there is but one grade of salary (735 fl.,) with a like decennial increase, and twenty-five per cent. of a third of the fees to each of the four oldest teachers. The directors at the higher gymnasiums receive 315 fl. in addition, and at the lower, 210 fl. At the State gymnasiums the average income of the directors, aside from the tuition fees, is 1,335 fl. (ranging from 945 fl. to 1,995 fl.)—of the regular teachers, 895 fl. Thirty-three of the directors and ninety of the teachers had in 1863 been fourteen years or more in service. Catechists giving other than religious instruction, or the entire religious instruction at a higher gymnasium, receive from 525 fl. to 840 fl., according to the grade of the school—at the lower gymnasiums, but 525 fl.—with the decennial increase. All instruction beyond the ordinary school hours is forbidden. At the religious gymnasiums the lay teachers are paid as at State gymnasiums of the third grade, the ecclesiastics having no claim to a fixed salary but usually receiving a regular remuneration from their superiors. Associate teachers are paid by their tuition fees, which are fixed by the director and teacher, ordinarily 10 fl. for each scholar.

Retiring teachers at the religious gymnasiums simply return to their former position in their order. Other regular teachers have in general the same right of pension with other officials, commencing at ten years of service with one-third of the salary, increased to one-half at twenty-five years, and to the whole salary after thirty years. Their widows and orphans have a pension of one-third of the salary, not to exceed 350 fl., which may be increased if there be more than three children. Other teachers are without pension.

Branches of Instruction.—The studies are divided into the strictly obligatory, the conditionally obligatory, and the optional. Those that are obligatory upon all students, without exception, are religion, Latin and Greek, the native language, geography and history, mathematics, natural history, physics, and the elements of philosophy—the latter alone being omitted in the lower gymnasiums. The conditionally obligatory are such as may be made absolutely obligatory upon any student at the will of his parents, such as the provincial languages, where others than the German are spoken. Other branches are wholly optional.

A "Plan of Study" is annually drawn up at each gymnasium and submitted to the approval of the State Ministry. There is much uniformity in these plans, the greatest variations occurring at gymnasia where German is not the native language of a majority of the students. In the "Plan of Organization" upon which the gymnasial system is based, the object that should be aimed at in each branch of instruction and the manner in which it should be pursued are detailed, as is very briefly indicated in the following sections.

Latin.—In the lower gymnasia an intimate acquaintance with Latin etymology and with the most necessary rules of syntax is secured, not so much by strictly conducted recitations and a memorizing of the rules, as by numerous, carefully prepared, written and oral exercises. In the first class, eight hours weekly are given to practice in the regular declensions, rules of gender, adjectives, the more important pronouns, cardinal and ordinal numbers, the regular conjugations, the use of the infinitive after certain verbs and adjective predicates, and of the subjunctive after certain conjunctions. With this is associated translation, both from and into Latin, and the memorizing of all the occurring Latin words. Afterwards a half-hour weekly is given to composition with close reference to the acquired grammar and vocabulary. In the second class an equal time is given to the remainder of the etymology and to the use of the accusative with the infinitive, and of the ablative absolute, with a like preparation and correction of written exercises. In the third and fourth classes, (six hours,) the syntax is limited to the most necessary rules, avoiding the more difficult details, the object being to assure perfect clearness of understanding and thoroughness in application. In the third class, four hours are given to reading "Historia Antiqua," and in the fourth, to Cæsar's *Bellum Gallicum* and selections from Ovid, with some instructions in prosody. The written exercises are always orally corrected in class, the teacher afterwards satisfying himself by inspection that the corrections have been understandingly made by the student.

In the higher gymnasium the course is continued by numerous written exercises, (one hour weekly,) aiming at accuracy in grammar and a familiarity with the peculiarities of Latin expression and the general principles of Latin style, increasing gradually in difficulty and made really beneficial by most scrupulous correction. In the fifth class, five hours are given to an equally careful reading of Livy and Ovid's *Metamorphoses*—in the sixth, the same time to Sallust, Cicero, Cæsar's *Bellum Civile*, and Virgil—in the seventh, four hours to Cicero, and the *Æneid*—and in the eighth, four hours to Tacitus and Horace.

Greek.—In the lower gymnasium there should be acquired a knowledge of the etymology of the Attic dialect and of the most essential rules of syntax, continued in the higher classes by the reading of the best classics, so far as the limited time given to the branch permits. The study is commenced in the third class and the method of the Latin course is pursued throughout. Students not intending to pursue their studies beyond

the lower gymnasium may be released from Greek during the third and fourth years, instead of which, in the Vienna gymnasium, thorough instruction in French is given. Four hours are devoted to Greek in the fourth and seventh classes, and five in the remainder. Xenophon is commenced in the fourth class, followed by the Iliad and Herodotus—in the seventh class, the Odyssey, Demosthenes' minor orations, and Sophocles—in the eighth, Plato and Sophocles.

German.—Ability to read, write, and speak the language correctly is the object aimed at in this instruction in the lower gymnasium—in the higher classes, readiness and correctness in the use of language for the expression of thought, a broader historical knowledge of the language and its literature, and an acquaintance with the characteristics of the principal styles of prose and poetry. Four hours are given to it in the first and second classes, two hours in the fifth, and three in the remainder. Commencing with a review of what has been learned of the simple sentence in the common school, further grammatical instruction is confined to the two lower classes and principally to the syntax of the compound sentence. Great care is taken, by means of well arranged dictation exercises, to secure a fixed orthography, and due attention is given to the spelling of foreign words. The reading books contain only pieces that are classical in style, serving also to illustrate the instruction that is given in other branches, and designed to have a favorable influence upon the character of the student. The exercises in this connection are reading, grammatical analysis, recitation of the contents of the pieces, and committing to memory the finer ones, with instruction in style and metrics. The written exercises (at least once in two weeks,) commence with a simple writing over of short tales and descriptions, chiefly geographical or from natural history, advancing gradually in the liberty of expression that is allowed in the reproduction. In the second and subsequent classes, the subjects are usually connected with the history lessons, and in the fourth class may include forms of business composition.

In the higher classes the written exercises are designed to promote increased dexterity and correctness in the use of language, and have close relation with the subject matter of instruction in the other branches, which are now of a character to excite deeper thought and to give clearness and a degree of originality to the ideas of the pupil. The instruction in history and the reading of the Greek and Roman classics and of German literature afford an abundance of material, while the previous study of the subjects of the compositions secures the requisite character of thought. Finally, readiness in oral discourse is cultivated in the eighth class by exercises in which two students engage in discussion upon a selected theme, followed by the criticisms of the class and the concluding judgment of the teacher. The history of the literature of the earlier and middle ages is, as taught, principally a history of the development of the language. No text-book is used aside from the readers. Of modern literature the students are left to gain a more thorough knowledge by their

private reading. An analytical treatment of the fundamental ideas of aesthetics forms an exercise of the higher class.

When German is not the prevalent language in a district, instruction in the native language is conducted in the same manner as above described with German. Where instruction is given in a provincial language not spoken by a majority of the students, it commences in the second class and is limited, in the lower gymnasiums, to fluency in reading and speaking, and in the higher classes to grammatical correctness and readiness in composition and an acquaintance with its literature. German is strictly obligatory upon all, even where it is not the language of instruction. A third language cannot be commenced, even as a conditionally obligatory branch, till the fifth class.

Geography and History.—Three hours a week throughout the course are given to instruction in these branches. After a full year spent in acquiring a correct idea of the physical characteristics of the earth's surface and its most important political divisions, geography for the rest of the course is taught in immediate connection with history, so that from the first, the relation of the earth to man and of the land to the people is made the prime consideration. In the three higher classes of the lower gymnasium, historical instruction includes a simple but animated description of the most important events and characters of ancient and modern times, impressing the more important names and dates by recitations and reviews—modern history being taught to the most advantage in association with the principal facts of Austrian history. In the upper gymnasium most stress is laid upon the causes and effects of events, the development of states and of their constitution and culture, giving special prominence to Greek and Roman history, and to the present condition of the Austrian Empire, its ethnography, State constitution and administration, physical resources, &c. The written exercises, already described, are of great service in their impressive and suggestive influence.

Mathematics.—Three hours a week are given to mathematics in the lower gymnasium. The arithmetical instruction is intended to suffice for the practical wants of those entering immediately into business and to prepare for the algebraical instruction of the higher classes. A full understanding of each operation is united with dexterity in its application and a knowledge of those relations in actual life to which the rule will apply. The elements of algebra in the third class serve to make the extraction of roots more easily understood and train the student to independent thought in the translation of given relations into the language of mathematical symbols. In all this instruction no text-book is employed. Systematic but not strictly demonstrative exercises upon the relations and properties of geometrical figures also tend to awaken the mathematical faculty, which at a later age is with more difficulty aroused to persistent action. In the higher gymnasium the chief object of algebraical instruction is a full comprehension of the relations of numbers and of arithmetical operations, with exercises in those more difficult. In geom-

etry (which includes trigonometry, analytical geometry, and conic sections,) there is sought to be obtained a readiness in the original demonstration and solution of propositions and problems based upon already known and understood principles. Four hours are given to this branch in the fifth class; three in the sixth and seventh; and one in the eighth.

Natural History.—Two hours a week are devoted to zoology in the first three semesters, to botany in the second semester of the second class, and to mineralogy in the third class. In zoological instruction, animals are classed in characteristic groups, and the students are made familiar with their distinctive differences, with the aid, so far as possible, of specimens and representations, while special attention is paid to their habits and relations to mankind. Botany is commenced with instruction in organography and terminology, training the students to recognize the individual organs in numerous distinct species and to describe them in correct terms, advancing without regard to systems from the easiest to the more difficult. In mineralogy the chief attention is given to those minerals which are most widely distributed, most useful, or most important in scientific respects. In the fifth and sixth classes of the higher gymnasium two hours are given to these branches, with a more thoroughly scientific treatment and with especial reference to the connection of mineralogy to geognosy, and of botany and zoology to paleontology, and to the geographical distribution of animals and plants and their relations to man.

Physica.—The aim of the instruction in physics in the lower gymnasium, (two hours in the third class and three in the fourth,) is a knowledge of the most important laws of nature, with their more easily understood applications in explanation of natural phenomena and in the arts. In the two highest classes, (for three hours weekly,) the same branches, including chemistry and the elements of astronomy, are treated in a more thoroughly scientific manner, and with the aid of elementary mathematics where applicable.

Elements of Philosophy.—This instruction includes those laws of formal logic that are recognized in all philosophical systems, (long previously unconsciously followed by the student in his study of other branches,) and empirical psychology with copious reference to the student's acquirements in history and literature and as a fertile inducement to wider thought. Any further extension of this introduction to philosophy, from the difficulty of limiting the subject and of avoiding a preference for some philosophical system, has been attempted at but few institutions. Two hours in the seventh and eighth classes are given to this branch.

Religion.—Religious instruction is given throughout the course, two hours weekly, with an additional hour in the eighth class. It commences with committing the catechism to memory, followed in the second class by explanations of the catholic liturgy, and in the third and fourth classes by biblical history. Instruction is then given in the grounds of Christian faith, to which succeed, in the two highest classes, a system of general

ethics and Church history. On the part of students of other sects, both Christian and Jewish, similar instruction is required, which should be given, as far as possible, within the gymnasium. All are required to attend divine service and the religious exercises of their sect, for which purpose Jewish students are excused from school duties upon their feast days.

Optional Branches.—These include penmanship, music, drawing, the modern languages, stenography, and gymnastics. Ornamental penmanship receives the most general attention, all the members of the two lowest classes, in which there are two hours less of weekly obligatory study, taking part in it. So also, scarcely any gymnasium is without instruction in singing, all the students, except those that have no faculty whatever for music, being divided into two sections for boys' and mens' voices, and receiving two hours instruction each week. Instrumental music is taught only at five institutions. Stenography is often taken up in the higher classes. Of the modern languages, French is the most common, English being taught in but nine schools, but Italian in most of the gymnasiums of Lower Austria, Styria, Carinthia, and Carniola. Gymnastics are being gradually introduced, but are still wholly wanting in Galicia, Dalmatia, and Lombardy and Venice.

Text-books, Apparatus and Libraries.—Each board of teachers is permitted to select its text-books from the catalogue of those that have been approved by the State Ministry, and a teacher is seldom restricted from using in his own classes text-books of his own composition, of which books there is a very considerable number. In the modern languages and other optional branches, the selection of books is left to the individual teachers, under the supervision of the director. Special attention has of late years been given to providing apparatus, natural history collections, &c., as aids in instruction, and all gymnasiums are required to be supplied with wall maps, globes, atlases, and similar forms of apparatus. Libraries for both teachers and students have also been established in all the gymnasiums.

Terms and Vacations.—The school year continues from the 1st of October to the 31st of July—commencing and ending in Galicia and Bukovina a month earlier, in the Littorale and in Lombardy and Venice a month later. Five days vacation are given between the semesters, and the directors can excuse from attendance upon four other days. Thursdays, or two afternoons in each week, are also free. In some of the city gymnasiums it has become customary to give all the instruction in the obligatory branches in the forenoon.

Requirements for admission.—Candidates for admission must be at least nine years of age and have a legal certificate of having passed through the studies of the fourth high school class and the preceding gymnasial studies. An examination is required before admission to the first class, but otherwise only when the candidate has not previously belonged to a public gymnasium. When there are many candidates found unprepared for admission to the first class, a preparatory class may be formed, either

temporarily or permanently, in which the instruction is limited to language and arithmetic, the scholars receiving instruction in religion, geography, and natural history as transient students (*Hospitanten*) of the first class. The number of students in a class should not exceed fifty, this limit being maintained by dismissal to other gymnasiums or by the formation of parallel classes. But the establishment of the latter is not imperative, and is not permitted at the State gymnasiums if great difficulty attends the procurement of rooms and teachers. Still where the attendance at the lower gymnasium makes a division of its classes a permanent necessity, an increase of teacherships is allowed even at the latter institutions. If this excess extends to the higher classes, the establishment of a new gymnasium is preferable.

Tuition Fees.—An admission fee of 2 fl. 10 kr. is required at the State gymnasiums and may be imposed at the others. The tuition fees at most of the State gymnasiums amount to 12 fl. 60 kr., paid semi-annually in advance, varying to some extent at other schools. All members of the two higher classes who belong to a religious order are exempt from these fees, and other needy students are exempted upon gaining a first-grade certificate and the highest credits for morals, attention and diligence. The number thus gratuitously instructed amounted in 1853 to thirty-three per cent. and had increased in 1863 to forty-two per cent. of the whole number of students. This exemption in most cases continues through the course, unless forfeited by an unfavorable report in morals, a third-grade certificate, or a second-grade certificate for two semesters in succession.

Discipline.—To aid in maintaining order there is in each room a "class-book" for the record by each teacher of the absences, tardiness, and moral behavior of the students during his hours of instruction. The usual punishments are retention in school under the charge of a teacher for the study of neglected lessons, private or public reprimand by the teacher or director, imprisonment for eight hours or less, (but not at night,) and expulsion from the gymnasium, from all intermediate schools of the Empire, or from all educational institutions of every kind. The first grade of expulsion must be with the approval of the provincial authorities, the latter with that of the State Ministry. The visiting of inns and coffee houses can only be occasional, and play there is wholly forbidden. Other restrictions may be imposed by the board of teachers. School mass and school prayers are regularly held, with exhortations upon Sundays and feast days, and a due observance of Passion week. The Holy Sacrament is usually administered five times a year.

Examinations and Gradations.—A gradation of the students is made at the end of each semester. The notes of the individual teachers in each study are compared by the teachers of the class, unitedly, and a judgment is passed upon the morals, attention, and diligence of each student, upon which the board of teachers bases the "general certificate" classification, showing the eminent or simple fitness of the student for the

next higher course of study, or his relative or absolute unfitness. A stricter gradation into three classes is also made, with a more careful weighing of all the influencing circumstances. At the close of the year, for the purpose of promotion, a written examination is held in the languages, history, and mathematics, under the charge of the director and teachers of the respective branches in the next higher class, supplemented by an oral examination if necessary to a satisfactory decision. Failure in a single branch prevents promotion, unless for special reasons a second examination be granted at the close of vacation. The classification is published in the "Hauptkatalog," and with the report of the board of teachers is forwarded to the provincial authorities. This examination may be followed by exhibition exercises and a distribution of prizes, and at the same time the annual report, or "programme," is published, containing a scientific or pedagogical essay, the plan of study and statistics of the gymnasium, &c. A regular exchange of programmes is made between all the gymnasia of Austria, one hundred and seventy in Prussia, and thirty in Bavaria.

The "maturity examination" forms the keystone of the whole course of gymnasial study, without which no student can be matriculated in any department of an Austrian university, nor claim the legal advantages resulting from attendance at a foreign institution. Two months before the close of the school year, those who desire it report themselves in writing, through their parents, to the class-teacher of the highest class, and the board of teachers can dissuade but cannot exclude from the examination any thus presenting themselves. The gymnasial inspector fixes the time and appoints the subjects for the written examination, which consists of a composition in the native language, (for which five hours are given,) a translation from Latin, (two hours,) and from Greek, (three hours,) a translation into Latin, (three hours,) a mathematical exercise, (four hours,) and also an exercise in a second provincial language, if its study has been obligatory upon any student. The decision upon this examination is made by the teachers of the class. The oral examination is conducted by the inspector, or his deputy, and embraces all the branches of the higher class, excepting philosophy and in some cases the language of instruction. The object of both examinations is a determination of the degree of mental maturity acquired by the student, and the final decision is given by the inspector, the director, and the examining teachers conjointly upon the degree of fitness or unfitness for admission to the University. The consequent certificate details the studies and moral conduct of the student during the gymnasial course and his standing in each study. Candidates found unfitted are rejected for a half or whole year.

Private Instruction.—Private students may be enrolled at any gymnasium as "privatisten," under the same conditions as govern the admission of regular students, receiving no instruction but required to be present at all examinations and treated at the maturity examination in every way like the public students. Students not thus enrolled, are called

"private students" in a stricter sense. They can enter the gymnasial classes at any time by undergoing an examination, but cannot be admitted to the maturity examination before the age of eighteen years. No one can open a private gymnasium but a citizen of Austria, of unspotted moral and political character, and possessing the qualifications for gymnasial teachership. The institution must be organized essentially in accordance with the State system and its teachers be approved by an examining board. The privilege may be granted to any well tested institution to rank its students as "privatisten" at a public gymnasium, and such as have long proven their efficiency may be themselves raised to the position of public gymnasiums.

Training and Examination of Teachers.—The two institutions at Vienna for the training of gymnasial teachers, the "Philological and Historical Seminary" and the "Physical Institute," are both attached to the philosophical department of the Vienna University and are conducted by its professors. The exercises at the Seminary consist of written exercises in classical philology, oral translations and explanations of Greek and Latin authors, essays and disputations upon historical and other themes, and colloquies with the instructor. Instruction is gratuitous and open to all members of the philosophical department of the university. After a half-year's attendance upon the exercises, students may become regular members of the philological or historical department of the Seminary, or of both, obligating themselves to a two years' attendance upon the exercises of their division. Students are admitted to the Physical Institute who have heard mathematical and physical lectures for at least a year at a university or technical institute. The number is limited to twelve, six of whom receive stipends, and the course continues through three semesters. After a course of practice in the experiments required in physical instruction in the gymnasium, they are engaged in independent scientific investigations, for which they have the aid of the university library and observatory. The material and apparatus required for their use is furnished gratuitously. The organization of the Philological and Historical Seminaries at Gratz, Innsbruck, Prague, and Lemberg is similar.

Candidates for a teachership must present themselves to an examining board with satisfactory evidence of having completed the three years' university course. For the purpose of examination the studies of the gymnasium are divided into five groups; viz.—(1.) The entire course of classical study—(2.) of geography and history—(3.) of mathematics and physics, or natural history for the whole course with mathematics and physics for the lower gymnasium—(4.) elements of philosophy, with one of the first three groups for the lower gymnasium—And (5.) the German language, with one classical language for the entire course and the other for the lower gymnasium, with or without a provincial language. Catechists should pass an examination in the first three groups for the lower gymnasium only, or in the elements of philosophy, in German, or in a provincial language. The requirements in the several groups are—(1.) a thor-

ough reading of the classics used in the gymnasiums and knowledge of Greek and Roman history, and requisite familiarity with classical philology—(2.) a familiarity with the pragmatism of events, a scientific knowledge of geography, and thorough acquaintance with the geography and history of the ancients and of Austria—(3.) a ready familiarity with elementary mathematics, practice in analytical geometry, and acquaintance with the calculus, a knowledge of the principles of physics, of chemistry, astronomy and mathematical geography, of the principal systems of natural history, of geology, and of the anatomy and physiology of animals and plants—(4.) the study of philosophical works and of the history of philosophy—and (5.) a knowledge of the history and literature of the language in question, in connection with political history, an acquaintance with the older authors and familiarity with the classical works in the language.

The examination requires two exercises upon the special subject of examination, with a third having a didactic purport, for the preparation of which, twelve weeks are given; an additional exercise in each branch, to be completed in twelve hours; an oral examination as a test of correctness in the use of the language of instruction and of German; and, finally, a trial year spent in actual instruction. The certificate of the board contains, in detail, the result of the examination and their opinion of the candidate. The trial year is spent at a public gymnasium selected by the provincial authorities, where he has charge of two classes, usually for six hours in the week, under the supervision of the director and class ordinarium. If his incapacity is evident he may be immediately removed; otherwise he receives a certificate from the board of teachers. If the candidate be not appointed to a position within three years thereafter, he is required to obtain a renewal of his certificate from a board of examiners, with or without a second examination.

Educational Funds and Expense of the Gymnasiums.—The "Educational Fund" is in reality composed of the several provincial funds centered at Vienna, and is designed not only for the benefit of the gymnasiums, but for the real schools and especially the universities. These funds suffered much during the first fifteen years of the century from the financial necessities of the government, which compelled in after years appropriations from the State treasury and the setting apart of certain revenues for the supply of the deficiencies of the fund. The income of the fund in 1864 amounted to 1,071,021 fl., of which 256,026 fl. belonged to Bohemia, 238,202 fl. to Lower Austria, 126,240 fl. to Moravia, and 104,979 fl. to Galicia. Of the whole amount, 624,165 fl. were derived from invested capital, 227,819 fl. from tuition fees at the gymnasiums, real schools, and universities, and the remainder from various other sources.

The expenses of a complete gymnasium may be estimated to average 17-18,000 fl., and of a lower gymnasium, 9-10,000 fl., and the appropriations of the State to both classes must be about 900,000 fl. Adding to this the grants made to other than State gymnasiums, and not taking into

consideration the expenses of inspection and administration, there can be no doubt that nearly the whole of the above income is absorbed upon these institutions, and that the expenses of the real schools and universities fall almost wholly as a tax upon the State treasury. Considering that the gymnasiums of the religious orders are sustained at a somewhat less expense (6-12,000 fl.), it may be approximately estimated that about 1,400,000 fl. are annually expended in all the non-Hungarian provinces of the Empire for the support of gymnasial instruction.

III.—RESULTS OF THE PRESENT SYSTEM.

While, as has been seen, the development of gymnasial instruction in Austria equals, in many respects, that in most of the States of Germany, there is still room for a large increase in the number of intermediate schools, both of the higher and lower grades. Nowhere is their usefulness, as yet certainly, limited by their redundancy. In the Tyrol, where they are relatively most abundant, there is still but one gymnasial student to 414 inhabitants; but one to 469 in Moravia and Silesia; to 568 in Carinthia and Carniola; to 615 in Lower Austria and the Littorale; to 675 in Bohemia and Upper Austria; to 800 in Dalmatia, Galicia, Bukowina, and Styria; to 875 in Lombardy and Venice; and to 2,500 in the Frontier—while as respects nationality, there is but one student to 345 Jews, 587 Germans, 670 Poles, Szechish Moravians, and Slovenes, 778 Italians, and 12-1800 Wallachs, Ruthenes, Croats, and Servians. The increase of attendance, however, especially since 1858, has been very large, amounting since 1851 to from thirty to seventy-five per cent., (excepting the Tyrol, Dalmatia, and Lombardy and Venice, where the increase was much less,) and as an evident refutation of the asserted Germanizing tendency of the system, this increase has been in most cases much the greatest among the non-German races. There has been at the same time a constant diminution in the number of private scholars, showing an increased confidence in the newly organized gymnasiums on the part of the higher and more opulent classes. Indeed more than two-fifths of the "privatis-ten" are found in the kingdom of Lombardy and Venice, and half of the remainder in the five chief cities of German Austria. This last fact is chiefly due to the already overcrowded condition of the lower classes. This overcrowding of the classes, necessarily resulting from the rapidly increased attendance, is far too general for the good of the institutions, about two-fifths of the lower classes exceeding, and sometimes very largely, the legal maximum of fifty in a room. The same occurs, but to a less extent, in the upper classes.

The number of assistants has since 1856 averaged one-third that of the regular teachers, and the disproportion is increasing rather than diminishing. The information respecting the efficiency of the examining boards is incomplete, but it would appear that from 1851 to 1863, there were 1,122 teachers examined and approved. In 1863, of the 297 regular teachers at the gymnasiums of the religious orders, but forty-eight of the

126 located since 1850 had been examined—on the other hand, of the 570 at the other gymnasiums, but twenty-seven out of 442 had not been examined. Great disadvantages and discouragement doubtless result not only from the withholding the right of pension from the teachers of the religious gymnasiums, but also from the precarious pecuniary circumstances of the teachers, as a class, at all the gymnasiums. It was shown by Bonitz in 1861 that within the preceding ten years the incomes of the teachers had fallen off, while the demand for preparatory training and efficiency had greatly advanced, and at the same time the necessary expenses of living were considerably greater—the cost of house-rent, board and fuel for a married couple without children being estimated at not much less than 900 fl. in Vienna, 700 fl. in Prague, and 600 fl. in other cities, and not much less for an unmarried person. On entering service the condition of the teacher compares not unfavorably with that of other State officials of like grade, but the comparison becomes constantly less favorable, the increase of income affording small compensation for the elsewhere existing chance of promotion.

The efficiency of many institutions is greatly impaired by the want of suitable provision for libraries and other collections. Forty-one gymnasiums have libraries for the teachers of over 2,000 and averaging 3,500 volumes each, while there are others with but a hundred volumes, or even less, and of the students' libraries there are but twenty-two that average over 2,000 volumes and in many gymnasiums they are wholly wanting. The deficiency is made up, however, in some cases by access to the libraries of other institutions. The natural history cabinets are mostly of very recent establishment and have been greatly aided by the Zoological and Botanical Society of Vienna. Fourteen gymnasiums have collections of vertebrate animals averaging 400 specimens, twelve have collections of invertebrates that average 6,500 specimens, and twenty-three have herbariums that average 4,000 specimens. The mineralogical cabinets, of which fifty-seven average over 2,000 specimens, are in general the best arranged. In the larger cities use is made of the various museums, but the backwardness of instruction at many schools is due to the want of all means of illustration. The apparatus for instruction in physics, geometry, geography, &c., is also too often greatly deficient.

The amount of stipends paid in 1863 was 206,373 fl., of which 56,298 fl. belonged to the gymnasiums of Bohemia, 31,351 fl. to Lower Austria, and 25,659 fl. to Galicia—the amount of each stipend averaging about 100 fl. Since the abolition of the stipends derived from the tuition fees, the need of State appropriations to supply the deficiencies of private endowments has been more apparent. Some assistance is derived from aid societies, collections, concerts, &c., but many students are compelled to gain a portion of their support by the private instruction of pupils of the lower classes or in the common schools.

Upon a comparison of the ages of the students at the close of the first year at all the gymnasiums with those in the highest class, it is found that the course of study is actually completed within the prescribed eight years. The exceptions occur chiefly in the polyglot provinces, where the instruction of the common school is the most deficient. Were admission deferred from the beginning to the close of the tenth year, many of the difficulties in the way of instruction would be removed, as much of the over-burdening complained of in the lowest class is due to the defective preparation of the entering scholars. The course of study, notwithstanding the complaints at first made against it, has already gained general approval. Some changes might be advantageously made in regard to geography and history, as well as natural history and philosophy, and the need is also felt of placing drawing among the obligatory branches of the lower gymnasium. In the optional branches—in singing and gymnastics especially—it is desirable that tuition fees were done away with. A partial criterion of the efficiency of instruction may be found in the results of the annual classification, at which the percentage of those found fitted for promotion was in 1858 and in the seven preceding years about seventy-six per cent., and has since increased to eighty-four per cent. Yet there has been a gradual diminution in the number of students that have attained the certificate of the first grade, for preeminent scholarship, from one-fifth in 1851 to one-seventh in 1863. In close conformity with the results of this classification is the relative number of scholars in the several classes, the larger decrease from the fourth to the fifth and from the fifth to the sixth classes being due to the withdrawal of many pupils at the close of the gymnasial course, or at least after a single year in the higher gymnasium. At the close of the course about one-seventh leave without undergoing the maturity examination, of whom two-thirds engage in theological study. Of those examined, ninety-two per cent. succeed at once, two-fifths of the remainder being rejected for six months—the rest, with an occasional exception, passing at the end of a year. Nearly one-fifth receive the highest grade of certificate. The standing of the “privatisten” at the examination is found notably inferior to that of the gymnasial students. Of those that have passed the maturity examination the statistics of many years show that with great uniformity forty-one per cent. engage in the study of theology, thirty-seven in law and political economy, thirteen in medical, and seven per cent. in philosophical study.

But slight changes can be pointed out as desirable in the method of administration, prominent among which would be the restoration of the provincial school authorities in the form that existed from 1850 to 1854.

III. REAL SCHOOLS IN AUSTRIA.

1. *History.*

Soon after the idea of the real schools had taken root in Germany, the Moravian Bureau of Trade and Manufactures projected the establishment of a "Mechanics' School" and in 1751 approved a plan drawn up for it by Rabstein, but the want of suitable teachers and books and the breaking out of the seven-years war, prevented its going into operation. Empress Maria Theresa had already in 1745 organized the first university lectures upon experimental physics and in 1757 those upon mechanics, had in 1763 permitted instruction in book-keeping to be given at the Piarrist schools, and even established several schools for apprentices. Wolf soon afterwards came from Baden to Vienna and laid before the Empress the plan of a real institute, to include a real academy, real school, and an apprentices' school, and after a trial course in 1770 he was charged with the establishment of the "Real Commercial Academy," the purpose of which was "to afford to young men, who intend to devote themselves to commercial pursuits, a fundamental knowledge of all that distinguishes a skillful commercial man from a shopkeeper." The course was biennial and included writing and arithmetic, German, French, and Italian, general and commercial geography, the essentials of geometry, mechanics, physics, logic, morals, philosophical and positive jurisprudence, commercial and maritime law, book-keeping and drawing. The number of pupils was limited to sixty and the instruction was made exclusively practical. But the prohibitive system of Joseph II., (1784,) exerted a paralyzing influence upon foreign commerce, while domestic trade was left undeveloped, and thus the greatest incentives were wanting for self-improvement in the field for which the Academy was designed. While its definite purpose was to give a special commercial training, it became the aim of the fourth classes of the high schools, to which the Emperor was far more favorably disposed, to give to some extent a more extended general education to those not designing to pursue a course of gymnasial study.

Still the whole subject of real instruction met with comparative neglect until after the death of Joseph and the appointment of the commission for educational reform in 1795, whose attention was urgently called to it by Rottenhann. Less concerned for common schools and gymnasiums, yet as a large manufacturer of Bohemia he took an active interest in promoting education for commercial and trade purposes and became the creator of the first truly real school of Austria. Under his direction a detailed plan of study was drawn up by Gertsner, and was finally reported by him in 1799 as the basis of what should be "an entirely novel institution," taking the place for the business classes of the gymnasial and philosophical courses. After long delay the "Plan for the organization and administration of the entire German school system" appeared in 1804,

which recognized the real school, indeed, but only as a branch of the common schools and under the same administration. The general plan of Rottenhann was followed with some restriction of the subjects and reduction of the course to three years. The studies proposed as obligatory were religion, (seven hours weekly,) German, French, geography, and arithmetic, (each nine hours,) history and mechanics, (two hours,) elementary geometry, (five hours,) natural history and physics, and calligraphy, (seven hours,) and drawing, (six hours,)—and as obligatory at the pleasure of the parent, book-keeping, agriculture, mathematics and drawing for artists and artisans, and Italian, (five hours each,) commercial science, with the laws of exchange and a knowledge of commodities, physics, and chemistry, (four hours,) and agricultural drawing, (three hours.)

It was not until 1809 that the Commercial Academy was remodeled upon this plan as the first Austrian real school. Two years later the instruction relative to agriculture and art was omitted. As it was required for admission that the pupil should have completed both years of the fourth class at the high school, the latter became in fact a lower real school, giving preparatory instruction in the principal branches of the real school course. After the model of the Vienna school, institutions were founded at Brünn in 1811, at Brody in 1815, and at Lemberg in 1817, and the lower department of the naval school at Trieste was organized in the same year as a real school, independent of the common school authorities, as was now also that at Vienna, having been united to the Polytechnic Institute. But the spirit of political isolation that prevailed in the government and the restrictions almost prohibitory that were laid upon commerce, hindered the growth of these institutions, so that even in 1829 the three schools at Brünn, Brody and Lemberg numbered but little over two hundred pupils. The rapid progress that now commenced in the industry of Austria awakened a new interest in real schools, and Bohemia, which surpassed all the other provinces in the rapid development of its manufactures and trade, took the lead by establishing a real school at Prague, in 1833, in connection with the polytechnic institute, followed by one at Rakonitz in 1834, and at Reichenberg in 1837. Like schools were also organized by Styria at Gratz in 1841, and at Milan and Venice. At the same time the number of fourth classes at the high-schools was continually increasing and many private institutions of a special technical or commercial character were opened. In 1844 a revision of the real school plan had been resolved upon, which was interrupted by the revolution of 1848.

The new Ministry of Instruction found themselves less prepared for an immediate reorganization of the real schools than of the gymnasium. Feuchtersleben proposed that there should be in every city a lower real or burgher school of three classes, formed from the fourth high school classes, in which all the branches of the common school should be continued and at the same time special instruction be given preparatory for the

lower circle of city and country business. There should also be in each province at least one three-class real school, in which the general branches of the lower school should be carried still farther and special preparation be also given for higher technical studies. Exner more fully developed Feuchtersleben's ideas and adopted the real schools into his "Plan of Organization" of 1849, not as special schools for mathematics and natural science, but as institutions for a more general education, of which modern language and literature were to be the basis. He divided the school into upper and lower departments, each having three classes, which in the lower or burgher school should also be supplemented by a year's course of practical instruction for those designing to engage immediately in business. There could also exist incomplete burgher schools of two classes, and these, if supplemented by a year of practical instruction, could be established as independent schools. The reorganization of the schools according to these principles commenced in 1850, the two years' course in the fourth high school classes was altered to conform to the two lower classes of the burgher school, either complete or incomplete, and the already existing schools began to be changed to complete real schools. The first new school of the kind was established at Prague, with Czechish as the language of instruction.

But so much doubt existed respecting the possibility of fixing upon the real school the character of an institution for general culture, that a commission was appointed to advise upon the subject, upon whose motion the "Statute" of 1851 was decreed. This statute restored the schools as institutions for special instruction preparatory in part for higher technical studies and in part for certain branches of trade, and made corresponding changes in the course of study. The incomplete two-class burgher schools, formed from the fourth high school classes, still retained their connection with the common school. In 1853 followed regulations for the examination of teachers, and all the relations of the schools were made, with slight modifications, similar to those of the gymnasiums. Through the encouragement and aid rendered by the Emperor, and through the generous contributions and active interest of the communes, the schools were increased between 1851 and 1857 from fourteen institutions with 2,987 pupils to seventeen complete and eight lower real schools with 7,292 pupils. Besides these there were also established special schools of various kinds in connection with them, such as evening and Sunday schools for apprentices, commercial departments, schools for seamen, &c. Only one complete and one lower real school have been since founded by the State, but the communes have exerted themselves with redoubled zeal as the necessity for the higher education of the producing provinces has become more evident, adding seven complete and six lower real schools and increasing the number of scholars by one-fourth. The real school has met, indeed, with little of the opposition that has been experienced by the gymnasium.

A journal had now been established as the organ of the real schools, which immediately opened a vigorous discussion of the question of reform. The establishment of numerous trade and commercial schools had diminished the necessity for making the real school a substitute for such institutions, and the need on the other hand of supplying a means of higher education to the active, producing burgher class and of thus bridging over the chasm that separated them from the classically educated, became constantly more evident and pressing. A closer approach to the gymnasium in grade and organization became the watchword, and as numerous new real schools were projected in 1868 the reform of the plan of study was the more earnestly considered. Tabor and Chrudim took the lead in the endowment of "real gymnasiums," followed by Vienna, Baden, and St. Pölten. No legislative action, however, has been taken, though the Educational Council have expressed an opinion favorable to the prevalent tendency of development, and corresponding changes in the organization of the schools will doubtless soon follow.

2. *Present Organization and Condition of the Real Schools.*

Classification of the Schools.—According as the object is simply to give a comparatively complete but still intermediate degree of instruction preparatory to business pursuits, or a more extended course preparatory for the higher technical institutions, the real schools are divided into the lower three-class real school and the complete real school with three additional higher classes. In 1868 there were in Austria twenty-four complete and sixteen lower real schools. Though located chiefly at the capitals or larger cities, the attendance is never local but drawn from all parts of the provinces. All are "public" institutions, i. e. their certificates have full validity throughout the empire, and the larger number (23) are supported wholly or to a great extent by the State and are designated as "imperial royal" institutions. Fourteen are communal schools; two are sustained by endowments; that at Gratz is supported by the province of Styria; and one at Vienna is a private school, organized according to the regulations of the Statute and provided with examined teachers. None are in the hands of the religious orders and the sectarian character is limited to the supervision of the instruction by the bishops and the appointment of none but catholics as directors or regular teachers.

As at the gymnasium, that language is to be used in instruction with which the scholars are most conversant. Still the German is predominant, both because the majority of the schools are located in the German provinces and because in other provinces German is the more or less prevalent language of the business classes. In thirty-one schools it is almost exclusively used; four are Czechish, one Polish, and five Italian. Like the gymnasiums, the real schools are administered by the Ministry of Worship and Instruction, through the provincial authorities. Lower Austria alone has as yet a real school inspector, the duties of the office being performed in Moravia and Silesia by the gymnasial inspector and

in the other provinces by the common school inspector. The Educational Council, attached to the Ministry of Instruction, has a section for "higher technical institutions, real and special schools," with a single real school teacher among its members.

Teachers.—The grade and relations of the teachers, their appointment and privileges, are essentially the same as at the gymnasiums. The complete real schools should have twelve, and the lower seven regular teachers. The total number has increased from fifty-two regular teachers, (including directors and catechists,) twenty-one assistant and sixteen associate teachers in 1851, to 886 regular, 146 assistant, and 114 associate teachers in 1864, of whom but twenty-nine, besides the catechists, were ecclesiastics and only fifteen belonged to the religious orders. Each regular teacher is obligated to from eighteen to twenty hours of instruction per week—the directors, from ten to fourteen. At the State real schools the income of the regular teachers includes a salary of 630 fl. at the lower schools (840 fl. in Vienna,) and at the complete schools of 630 fl. or 840 fl. according to the relative length of service, (1,050 fl. and 1,260 fl. in Vienna,) with a decennial increase of 210 fl. The director receives 315 fl. in addition. The catechist, if only engaged in religious instruction, has a fixed salary of 630 fl., (840 fl. in Vienna.) In 1863 the average salary of the directors in the State schools was 1,068 fl., and of the 160 regular teachers, 838 fl., (ranging from 525 fl. to 1,680 fl.) At the several communal schools the incomes vary greatly, averaging 995 fl. for the directors, and 817 fl. for the remaining regular teachers.

Studies.—The distribution of the prescribed branches of study through the course varies to a considerable extent in the several schools, few even of the State institutions following exactly the same arrangement. The principles that should be essentially followed were laid down in the Plan of Organization of 1849, the Statute, and the supplementary instructions of the Ministry to the directors, and the course of instruction recommended may be concisely given as follows.

Religion.—This includes instruction in the several classes, two hours each week, in the catechism, the liturgy, biblical history, doctrinal religion, Christian morals, and church history.

German, or other Language used in instruction.—Four hours in the two lower classes and five in the remainder, given in the lower department to the study of etymology and syntax, exercises in orthography, the repeating of pieces from memory, and written exercises, with the purpose of assuring a correct and ready use, both in speaking and writing, of the language as employed in ordinary life. Instruction is also given in business composition in its various forms. In the upper classes it is the aim to improve the taste and enlarge the circle of thought of the student by instruction in the elements of rhetoric, rhetorical and logical analysis, reading the most prominent authors in the language, translations, and study of the history of the modern literature especially. Where a second provincial language is made obligatory a like course is to be pursued as

far as possible, three or four hours being given to it in the two lower classes, and two or three in the rest.

Geography and History.—Three hours in the lower and four in the higher classes. Especial attention is here given to the relations of geography to trade and commerce, and to the historical development, present condition, and commercial relations of Austria and of the native province.

Mathematics.—Four hours are given in the two lower classes to arithmetic and the simpler elements of algebra, and three hours in the third class to mercantile arithmetic and book-keeping and the principles of exchange and custom duties. Higher algebra, geometry and trigonometry receive nine hours in the fourth, five in the fifth, and two in the sixth class, while descriptive geometry and its application in machinery occupies two hours in the fourth and four in the higher classes.

Natural History.—Two hours in the first three semesters of the lower school and in each of the upper classes are given to zoology, botany and mineralogy in succession, with special reference to such objects as are most frequently met with and of the greatest importance in commerce and the arts, and with a more scientific treatment in the upper classes.

Physics.—Two hours in the first, second and fifth classes, and four in the sixth, with instruction in the most important physical laws and their application in the explanation of natural phenomena and in technical operations.

Chemistry.—In the third class (six hours) the instruction extends so far as to explain the principles of its most important applications in the arts, and in the higher classes (two hours) the student is enabled to read chemical works understandingly and to conduct chemical analyses. Organic chemistry is included, and prominence is given throughout to such applications of chemistry as are of especial importance in the respective provinces.

Drawing.—In this prominent branch ten hours are devoted in the two lower classes to geometrical drawing and the relations and laws of geometrical figures, followed in the remaining classes (six hours) by free hand drawing after copies, models, and even from memory, with perspective and the rules of projection and shade, extending to architectural ornamentation and technical designs and, in linear drawing, to plans of machinery and of buildings. In the highest class the instruction is somewhat adapted to the future wants of the several scholars, and modeling may take its place.

Architecture and Machinery.—Four hours are given in the third class to instruction in regard to building materials and the planning of buildings, and two hours in the sixth to the principal motive powers and forms of machinery, their uses, and the advantages and defects of each.

Calligraphy.—Two hours in the four lower classes to German and English running hand and ornamental penmanship.

Practical Course.—The additional year of practical instruction for students who desire farther training without entering the higher department occurs only at the schools at Gumpendorf, Prague, and Pisek. In this

course, technology, both mechanical and chemical, is a prominent branch, to which is closely allied a knowledge of commodities, whether raw or manufactured. It also includes mercantile arithmetic and book-keeping in all its branches, business composition and forms, the science of commerce, commercial law and the law of exchange, commercial geography, and drawing.

Optional Branches.—Of these the modern languages are most prominent; French is taught at twenty-five schools, Italian at twenty, and English at seven. Latin has also of late been admitted into the lower classes. Exercises in singing, in which most of the students participate, are held at thirty of the schools and gymnastics have been introduced at nineteen—dancing and instrumental music, each in but a single school. Stenography is taught to pupils of the higher classes in fifteen schools. Instruction in these branches is in some institutions wholly gratuitous—in others the fees vary widely.

Classification and other School Regulations.—The same or similar regulations are in force at the real schools as at the gymnasiums in respect to text-books, libraries, cabinets, apparatus, and other means of instruction, the conditions for admission, admission and tuition fees, vacations, and modes of discipline. The tuition fees at the State institutions vary from ten to twenty florins in each class, and yet more at the other schools. A like semi-annual classification as at the gymnasiums is made of the students according to the notes of the teachers upon their morals, attention, diligence, and progress, and at the close of the year an oral and written examination is made of their fitness for promotion. In drawing all the exercises of the year are taken into account and linear drawing, from its close connection with geometry, has equal weight with other branches. Failure in any single branch necessitates loss of promotion only at the pleasure of the board of teachers. No maturity examination is required. Closing festivities and an annual programme are customary. The admission and examination of private pupils are provided for as at the gymnasiums, and there are several private schools at Vienna and Prague whose pupils are enrolled at the public schools and presented there for examination.

Examination of Teachers.—Candidates for a regular teachership must have a gymnasial maturity certificate and have spent three years at a university or technical institute, except that for descriptive geometry and machinery the certificates of a complete real school are sufficient. The teacherships are divided into the three departments of language, geography and history, and mathematics and natural history, the latter dividing again into mathematics, descriptive geometry and linear drawing, physics and theoretical mechanics, machinery, natural history, and chemistry. The candidates in any division must show on examination a thorough knowledge and capacity in that department, though for teacherships in the lower school those subjects are omitted in the examination which are taught only in the higher classes. Candidates in the language of in-

struction must undergo an examination in some additional branch, at least for the lower classes. The examination is both written and oral, the former embraced in two questions, for the solution of which six or eight weeks are allowed, with liberty to employ any means of assistance attainable, and two other questions, for each of which twelve hours are given and the candidate restricted to his own mental resources. The oral examination extends beyond the special department to all the branches of the course. Trial is also finally made of the candidate's natural fitness for teaching. The examination, if unsatisfactory, may be repeated at such time and to such extent as the examining board may decide. A year spent in actual teaching follows, to farther test and improve his fitness for the actual duties of the schoolroom, one or two classes being placed in his charge for not over nine hours in the week, under the observation of the director and class ordinarius.

Expenses—The Educational Fund and the manner in which the real schools are sustained have been already described. The expenses of the schools vary considerably, but the total annual expenses of a complete real school may be estimated at 18,000 fl., and of a lower real school at 10,000 fl., according to which estimate the total expense of the real schools within the non-Hungarian provinces amounts annually to 600,000 fl.

Apprentice Schools.—Schools for factory operatives and tradesmen's apprentices, at the instigation of the chamber of commerce and trade, have been recently established at the real schools and at some of the gymnasiums, the teachers of those institutions being engaged to give instruction upon Sundays and weekday evenings. This instruction is in such branches as have reference to trade and industrial occupations, and of such special character as the local want may require.

3. *Results of the Real School System.*

What has already been effected through the establishment of real schools gives much promise for the future, but the system is yet in its infancy and there is a manifest need of a large increase in their numbers. This want is the most pressing in Upper Austria, Styria, Prague and Southern Bohemia, and of all the provinces Lower Austria alone is tolerably supplied. In the principal industrial provinces of Austria, the attendance in Moravia and Silesia is one scholar to a population of 820, in Lower Austria 908, in Bohemia 1,860, while in the comparatively non-producing provinces of Galicia and Bukowina it is but one in 7,800, and in Lombardy and Venice, where the idea of the real school has not yet become popular, but one in 8,420. The general ratio of attendance is less than at the gymnasiums. The nationalities rank somewhat as follows—Jews, (one in 680)—Germans and Czechish Moravians, (1,800)—Italians, Slovenes and Poles, (5,000)—Croats and Servians, (8,800)—Wallachs (14,000)—and Ruthenes, (41,000.) The increase of attendance from 1857 to 1868 was seventeen per cent., or three times that of the population, while

the total increase from 1851 to 1863 at the gymnasiums and real schools of all grades combined was fifty-eight per cent., or more than five times the rate of increase of the population. The attendance of "privatisten" is very small and is mostly confined to particular schools and especially to the lower classes. The overcrowding of the classes exists even to a greater extent than at the gymnasiums. The proportion of regular teachers is nearly the same, being seventy-three per cent. of the whole number.

In regard to salaries the real schools are decidedly inferior to the gymnasiums, and in many places the lower grade of salary barely suffices to afford the merest necessities of life. The condition of the libraries and natural history collections, &c., is as yet very unsatisfactory, notwithstanding all the liberality of the communes. The chemical laboratories everywhere are comparatively the best furnished. But in stipends the real schools are greatly deficient. Of all the 9,821 students of 1863, only 121 received stipends, which amounted to 14,020 fl., and these were mostly confined to the provincial capitals. The public mind, however, is awaking to their necessity, and assistance is also rendered to some extent by aid societies and in other ways.

On comparing the ages of the students of the first and sixth classes at the close of the year, it is found that not five but six years have elapsed between the classes and the result is nearly the same as if the regular course of instruction were seven instead of six years, showing that the present course is too narrowly limited in time. This result is partly due to the overburdening the pupils with branches that should be taught elsewhere. The introduction of architecture and machinery, which in other countries are found only in special schools, the likewise unusual excess of chemical instruction, and the admission of such studies as mercantile arithmetic and the principles of customs and exchange, which better belong to a special course of practical instruction, are condemned by all schoolmen. Even after the removal of these branches, and of calligraphy and business composition, which have been assumed from the higher course of the burgher school, a more judicious and systematic arrangement of the remaining branches would be required, especially of drawing and mathematics, natural history and physics. Hand in hand with this reform would go the extension of the course by studies of a broader educational character. More extended instruction in history, and the giving to the grammar and literature of some modern language an equal position with the present language of instruction, meet with universal approval, and many of the most experienced teachers desire the change of the lower real school into a real-gymnasium by the introduction of classical study, and the continuation of Latin, at least as an optional, in the higher classes. For this purpose the propriety of adding another year to the lower real school course is not disputed; but a like extension of the higher course will also be necessary if it be made to include, as is proposed, one or two modern languages, or Latin, and perhaps the elements of philosophy.

There would still remain, as optional branches, calligraphy, music, gymnastics, and one or more modern languages, for which there should be no requirement of special tuition fees. The burgher school would then be restored to its proper position and, with the newly organized apprentice schools, would accommodate many of those students who now attend the real schools from want of other institutions more suited to their needs and the attempt to supply whose requirements makes now the duty of the real school the more complicated and difficult.

During the last five years the proportion of scholars in each class that were found prepared for promotion at the end of the year has been seventy-five per cent. About twelve per cent. attain the certificate of the first grade. Nearly two-thirds of the students, upon completion of the course, enter upon higher technical studies, four per cent. upon commercial study, and as many more upon preparation for teacherships, while over one-fourth apply themselves to agricultural study or forestry, enter the naval academy, or engage immediately in business, in a government clerkship, or the like. An increase in the kinds of business into which one who has passed the real school can immediately enter, will naturally follow the proposed extension of its general studies and the introduction of the maturity examination as a guarantee of the intellectual proficiency of the student. This examination and the study of Latin will also probably assure admission to particular departments of university study.

IV.—PUBLIC INSTRUCTION IN HUNGARY, CROATIA, SLAVONIA AND TRANSYLVANIA.*

It is needless to represent in detail how little the general interests of education could prosper within the Hungarian provinces under the calamities and adverse influence of the last two centuries, the commotions attendant upon wars, revolutions and conquest, dissensions between races

*Prior to the revolution of 1848 "Hungary and its dependencies (*partes adnexæ*)" included Hungary proper, and the kingdom of Croatia and Slavonia. The Grand Duchy of Transylvania was essentially distinct, but united to Austria through the crown of Hungary. In 1849 the whole territory was reorganized into four separate provinces, similar to the western provinces of the Empire, viz., Hungary, Croatia and Slavonia, the Servian Waywodeship and Banat, and Transylvania. but in 1860 the Emperor found himself compelled to restore the earlier organization. The population of Hungary is very diverse in race and religion, comprising the Magyars (4,500,000) in the fertile regions of the centre and S. W., the Slovenes (1,800,000) in the mountain regions of the N. W. and N., and the Ruthenes (450,000) in those of the N. E., Serbians, Slavonians and Illyrians, 100,000 in the S., Croats and Wends (100,000) in the S. W., Wallachs (650,000) in the S. E., Germans (1,000,000) and Jews (350,000) in scattered districts and towns, besides Gipsies, Szeklers, Armenians, Bulgarians, &c. In religion, 4,700,000 are Roman Catholic, 750,000 Catholic or United Greek, 550,000 non-united or Orthodox Greek, 1,750,000 Calvinists, 900,000 Lutherans, and 350,000 Jews. The inhabitants of Croatia and Slavonia are principally Croats and Servians, and almost exclusively Roman Catholics. They are very little cultivated, in fact semi-barbarians. In Transylvania the distinctions of race and religion are so strongly defined as to have long been constitutionally recognised, dividing the territory into the lands of the Magyars (270,000 Calvinists and 300,000 Roman Catholic) chiefly in the N. E., of the Szeklers (Unitarians, 50,000) in the E., of the Saxons (Lutheran, 300,000) in the S. and N. E. and of the Wallachs, (500,000 united and 600,000 non-united Greek.)

and creeds, and unceasing struggles for civil and religious liberty. Yet early exceptions existed. The numerous German colonies that in the twelfth and thirteenth centuries had settled in Northern Hungary and in Transylvania were not only conspicuously prosperous even in times of the greatest trouble, but carefully nourished the germ of classical culture. Here the tenets of the Reformation found ready acceptance and the missionaries of Lutheran doctrine brought with them also Melancthon's system of instruction. In the middle of the sixteenth century there had been organized an excellent gymnasium at Cronstadt, and several of the previous Latin schools of the cities were afterwards raised to a similar grade, while scarcely a community of the Lutheran faith remained without its common school. The same was true to a less extent of the Calvinist communities, the Magyar pastors and teachers of that faith being less cultivated than the Lutheran Germans. Elementary instruction among the catholics was due almost solely to the labors of the Piarists. But from the times of Ferdinand II. and Cardinal Pázmán, the Jesuits began to multiply their gymnasiums, (the first was founded at Presburg in 1626,) so that at the expulsion of the order in 1773 there were twenty-seven in Hungary, six in Croatia and Slavonia, one in the Banat, and three in Transylvania, besides which the Jesuits had nine and the Piarists seven "convicts."

Before the middle of the eighteenth century many of the Protestant intermediate schools and endowments had perished, nearly all the Magyar magnates had returned to the catholic faith, and intercourse between the Germans and their fatherland had become neglected, to the detriment of culture and the schools. In the Banat also the long continued sway of the Turks and the exclusion, as in Transylvania, of the Wallachs and of all belonging to the Greek church from all political rights, had exerted a most depressing effect, and in the indifference of that church to educational matters the government itself finally interfered and directed the civil authorities to prepare a plan of school organization. But the Empress Maria Theresa took the school interests of the entire empire under her care and simultaneously with the creation of the Board of Education of the western provinces formed also an Educational and School Board for Hungary, through whom the first normal school was founded at Presburg in 1774. A "ratio educationis" or general school system, was also reported by them in 1777, adapting in some measure the school ordinances of the western provinces to the relations of the kingdom, for which purpose it was divided, with Croatia and Slavonia, into nine "literary districts." In each district there was immediately established a normal school, and the imperial estates took the lead in introducing common schools, which were required in every parish as far as practicable. The plan designed for the Greek population of the Banat was approved in 1774, under which within three years 373 schools were established, forty others enlarged, schoolbooks were prepared, and teachers sent to Vienna for instruction. But in 1778 the Banat was united to Hungary, forming

another literary district under its school system, which, however, received little attention beyond the normal schools and the imperial estates until after the death of the Empress, that active rivalry between cities and communities, landed proprietors and clergy, that was shown in Western Austria being here wanting. In Transylvania teachers were trained in the new method of instruction at the Theresian Orphan Asylum, but here, as in Hungary, the new system found little favor with the non-catholic population, and the course of study proposed in the "ratio educationis" for the Latin schools, gymnasiums and philosophical classes, was carried out but rarely.

On the expulsion of the Jesuits the property of the order was devoted to public instruction and realized in 1780 a sum of over 10,000,000 fl., from which deducting the sums set apart to the universities, there remained for other institutions an annual income of 280,000 fl., corresponding at the then rate of interest to a capital of 7,000,000 fl. That little immediate good resulted was chiefly owing to the violent though well-meant measures of Joseph II., by whom school attendance was made compulsory and extended even to Sunday instruction, German was introduced into the high schools and a knowledge of it made necessary to admission at the gymnasiums, tuition fees were established though repugnant to privilege and custom, and the effort was made to give a mixed or "paritätisch" character to the high school, which caused equal offense to all denominations. These and other educational measures excited so zealous an opposition that they became wholly inoperative and at the death of the Emperor (1790) were entirely done away with.

By the Hungarian diet, which reestablished the former constitutional position of the kingdom, a new "ratio educationis" was prepared in tolerable conformity with the principles of Rottenham as developed by the Austrian Board of Educational Reform, which was approved in 1806 and immediately introduced into all the catholic schools of Hungary and its dependencies. Every catholic community was required to sustain a trivial school, seventy-three cities and market towns should each have its high school, and the ten normal schools should serve as training institutions for teachers. Latin was made the language of instruction in the philosophical classes and as far as practicable at the gymnasiums.—There were then fifty-four complete six-class gymnasiums and six four-class "scholæ grammaticæ," thirty of which belonged to the religious orders. The gymnasiums at Ofen, Raab, Presburg, Kaschau, Grosswardien and Agram (the seats of the university and of the five academies,) were styled archgymnasiums and were under the same direction as those higher institutions. Philosophical classes existed at these places and at the lycæums at Erlau, Waizen, Steinamanger and Szegedin. Upon restoration of the convents, abolished by Joseph II., instruction was made obligatory upon them, and the transfer of existing gymnasiums to the care of the orders was encouraged. As the Piarists by the sequestration of their estates were disabled from supporting the twenty-five gymnasiums that

belonged to them, an appropriation of 16,000 fl. was made to each from the religious and educational funds.

But the protestants of Hungary, after the death of Joseph II., protested against all subordination to catholic school legislation and were permitted by the diet of 1791 to retain entire control of their schools of every grade. As they refused to introduce the "*ratio educationis*" into their schools, catholic children were in turn forbidden to attend them without special permission. Left thus wholly to themselves, the efforts of the communities for common school improvement were but partial and partially successful, and the zeal at first shown in some places soon died away. Though in the cities aid was given from the public treasury, yet most of the schools were dependent solely upon the protestant church and school funds, which were usually so insufficient that the teachers were obliged to resort to other occupations to eke out a support that their tuition fees and other perquisites failed to give. The protestant gymnasiums on the other hand became very numerous, though without any uniform course of study. Even at the five Lutheran gymnasiums of the first rank the classes were burdened with a multitude of studies to the neglect of the classics, the teachers were poorly paid, (with salaries generally of 100—140 fl., besides tuition fees, &c.,) and the libraries and cabinets were exceedingly deficient. The remaining Lutheran gymnasiums were far inferior to these, giving instruction only in the elements of geography and history, arithmetic, and geometry, in addition to religion and Latin. The numerous "*scholæ grammaticæ*" (some fifty in number) had been changed judiciously to high schools. The Reformed colleges at Debreczin and Sáros-Patak, the "*pupillæ oculi*" of Hungarian Calvinists, were very peculiarly organized. Of the students of the four-years course of philosophy and theology, which was conducted at each college by six professors who had received their training at foreign universities, four-fifths (distinguished by the "*toga*") were prepared for service as teachers and pastors, living together in the college under the supervision of a "senior" and twelve "sworn men" (*geschwornen*.) On completing the course they received teacherships for one or two years in the ten lower classes of the college. These institutions possessed libraries of 20,000 volumes each, well endowed museums, and endowment funds of 140,000 fl. and 120,000 fl. respectively. The college at Pápa and seven gymnasiums were organized to some extent in the same manner. The Magyar language was taught at all these schools and was made the language of instruction at Debreczin in 1798. But the need of reform at all these institutions was deeply felt and plans were sanctioned both by the Calvinist convention in 1807 and by the Lutheran in 1809, though neither could be put in operation.

The common schools for the Greeks were sustained by the government and existed, at least for boys, in nearly all the parishes of that sect in Hungary. Three teachers' schools were established for their benefit, and they had also two Latin schools in the Banat.

In Transylvania there were a lyceum and nine gymnasiums belonging to the catholics, five Lutheran gymnasiums, four colleges and six gymnasiums of the Calvinists, one college and three gymnasiums for Unitarians. There were also a normal school and seven catholic high schools sustained by the State, and two Greek catholic high schools. The Lutherans were well supplied with trivial schools, eight of which were enlarged to high schools. Teachers were trained at the gymnasiums. Some of the Calvinist and Unitarian common schools also were tolerably well organized. In the military districts scattered through the territory public instruction was in a somewhat better condition. There were here nine catholic schools, in which German, as the language of the army, was for the high most part the language of instruction.

In this undeveloped and unorganized condition public instruction remained until the middle of the present century.

In 1841 there were philosophical classes in Hungary at nineteen catholic and seventeen protestant institutions. The catholics had fifty-nine complete and nine lower gymnasiums, (of which fifty-seven belonged to the orders,) the Lutherans seven complete and six lower, the Calvinists three complete and five lower, and the Greek church two complete gymnasiums, besides the gymnasial courses at the five protestant colleges and seven lyceums. The Calvinists had also occasional Latin schools. The total attendance at the philosophical classes was 8,000—at the gymnasiums 20,000, of whom 16,000 were catholic, 2,000 Lutheran, 1,500 Calvinist, and 500 Greek. The instruction at the catholic institutions was still based upon the "ratio educationis" of 1806, while the salaries had been essentially increased. An attempt had been again made to reform the course of study at the Lutheran schools but with little success, owing to local opposition and prejudice. A kind of seminary for gymnasial training existed at Oedenburg, where the teachers received increased salaries, but elsewhere they were still dependent upon fees and perquisites and considered their office as only preliminary to a pastorate. The common schools, as respects support, were still left mainly without assistance, and where their maintenance was attempted to be made obligatory by legislation, it was resisted by the lower nobility. Even where some small endowment existed it was in the form of pasturage, fuel, fruit, wine, &c., and the teacher was in by far the most cases dependent upon agriculture, cattle raising, shopkeeping, or the offices of village notary or hedge advocate. An attempt was made in 1846 to remodel the catholic, Greek and Jewish schools after the School Constitution of Western Austria, but this "systema scholarum elementarium" was little heeded. The administration of the schools was especially defective, local supervision being almost unknown and actual control even more rarely exercised. In the Lutheran schools the age of admission and the course and method of teaching were wholly undetermined, and the same was true of the Reformed schools except so far as the teachers were scholars from the colleges and governed by traditionary rules and customs. Attendance was nowhere compulsory.

Every one that could had a private teacher, more or less poor, and the country children were sent to school only in winter and most irregularly. Among the Lutherans a motive for retaining a child at school existed in the requirements for confirmation. In all Hungary and its dependencies the actual attendance was but thirty-seven per cent.—of the Jewish children seventy-five per cent., of the Roman catholic and protestant above fifty per cent., of the Greek fourteen per cent., and of the Greek catholic but eight per cent. The training which the teachers received really amounted to little, as the normal schools had remained stationary and were ill suited for the work. The protestant schools were frequently supplied by pupils of the lyceums and gymnasiums, but teachers could be found everywhere who were simply workmen, still carrying on their trade, and yet oftener discharged soldiers, strolling actors, or the like. In order to diminish this evil several teachers' schools were finally established through the efforts of some of the bishops, and in 1845 the diet authorized five similar seminaries at State expense. But the efficiency of these institutions as well as of other legislative measures was greatly impaired by the rapid progress of the Magyar movement to enforce the supremacy of that language. This movement originated in the powerful reaction in favor of the national tongue that had followed the attempt of Joseph II. in 1783 to force the German upon Hungary as the official language. The Hungarian diet of 1791 had decreed that the Magyar should be the business language of the realm and made it a necessary study for all aspirants to public office. The National Academy, the theatre, and the press continued to exert a strong influence in the same direction, and in 1830 legislation for its supremacy was renewed, culminating in the requirement of 1844 that it should be made as soon as possible the sole language of instruction, of the pulpit and church, of books, &c., even in the non-Magyar districts. This aroused in turn the opposition of the Slaves especially, even more than of the Germans, and the attempted enforcement united in sympathy with them the Slovenes, Croats, and Servians, with political results most disastrous to Hungary.

In Transylvania in 1841 there were philosophical classes at three catholic lyceums, at four Calvinist and one unitarian colleges, and at five Lutheran gymnasiums; there were also thirteen Roman catholic, one Greek catholic, five Lutheran, five Calvinist, and three unitarian gymnasiums—all of which were under the control of the respective ecclesiastical authorities. The philosophical course in the catholic institutions was limited to philosophy, history, mathematics, and physics. German was taught at most of the colleges and was the language of instruction at the Lutheran schools. The catholic gymnasial course resembled that of the "ratio educationis." The Lutheran gymnasiums had a course of study, though but imperfectly carried out, in which real studies were to some extent included. The orthodox Greeks, debarred by law from every branch of public service but the military, took little interest in education, had no gymnasiums and rarely attended those of other sects, were but poorly sup-

plied with common schools, and their ecclesiastics even were often very ignorant. The catholic common schools were better sustained, but still deficient in number. The Saxon territory was the best supplied and with the best schools. The number of schools in 1846 was 1,986, attended by nearly one-half of the children. The Magyar influence here also was strongly felt, but was persistently resisted by the Saxons.

The revolution of 1848 had its natural effect upon all educational interests. But a new era commenced with the closer incorporation of these territories with the empire and the formation of distinct provinces with similar relations to those of Western Austria. The energy of the Ministry of Instruction under the direction of Thun in the regeneration of public instruction in these provinces effected more in one year than had been done in any previous decade. The first thing done was a complete enrolment of the common schools. The total number was found to be 10,422, of which there were in Hungary 4,471 catholic, 221 Greek, 879 Lutheran, 1,771 Calvinist, and 88 Jewish—in the Banat, 349 catholic, 181 Greek, 47 Lutheran, 15 Calvinist, and 12 Jewish—in Croatia, 196 catholic, 32 Greek, and 1 Jewish—in Transylvania, 657 catholic, 367 Greek, 461 Lutheran, 563 Calvinist, and 116 unitarian. With great uniformity two-thirds of these schools had but a single class, while of high schools there were 393 in Hungary, 26 in the Banat, 12 in Croatia, and 47 in Transylvania, and of female schools in the same provinces respectively 394, 22, 13, and 195. According to the language of instruction there were in Hungary 777 German, 1,711 Slavic, 3,984 Magyar, 246 Wallach, and 761 mixed—in the Banat, 204 German, 196 Slavic, 77 Magyar, 15 Wallach, and 112 mixed—in Croatia, 8 German, 157 Slavic, and 69 mixed—in Transylvania, 455 German, 949 Magyar, 742 Wallach, and 18 mixed. The average salary in the different districts of Hungary was from 90 fl. to 150 fl., in the Banat 210 fl., and in Croatia 250 fl. The total number of teachers was 14,181 in Hungary, 1,292 in the Banat, and 477 in Croatia, of whom 6,003 were catechists, 874 assistants, and 118 female teachers. The percentage of attendance in the districts of Hungary was from 30 to 60 per cent. of boys and from 22 to 47 per cent. of girls—in the Banat 43 per cent. of boys and 29 per cent. of girls—in Croatia 11 per cent.—and in Transylvania 26 per cent. of both sexes.

Effort was first made for the increase of schools and classes, the better position of the teachers, the enlargement of school-buildings, &c., in which the Ministry met with the hearty cooperation of many of the communities, and among the considerable sums at various times contributed in this behalf may be mentioned the gift from Baron Haynau of 1,000,000 fl. to the Hungarian Jews for the conspicuous part taken by them in the revolution, to be spent in the erection of model high schools. Teachers were drawn from the western provinces, sometimes at considerable expense, and as there were no trained female teachers the new larger female schools were entrusted to the female religious orders. The gradual introduction of more energetic school supervision largely increased the attendance of

scholars, the long interruptions of the country schools in summer became less frequent, calligraphy, drawing and singing were almost for the first time introduced, and Sunday schools for adults, hitherto almost unknown, were established in many places. The publication of the Hungarian "School Messenger" was commenced in 1856. The western districts of Hungary, (Oedenburg and Pesth-Ofen,) were preeminently active, taxing themselves heavily for school purposes and in five years doubling the number of their schools. The "Pusztas" or "Tanyas" schools were an entirely new creation, by which elementary instruction was given to the scattered villages in the out-lying districts of the cities of lower Hungary. Szegedin, for example, had within its jurisdiction a territory of thirteen square miles in extent, (290 English square miles,) in which over 2,000 children were growing up in complete ignorance. This territory was now divided into twenty districts, school houses were erected, and appropriations made for the support of teachers. Where permanently located teachers were out of the question, circuit teachers were employed, and by some of the bishops Franciscan monks were sent out as teachers for the inhabitants of the steppes.

The Banat resumed the activity of the days of Theresa. The school buildings destroyed in the war were rebuilt, new ones erected, others enlarged, and in 1854 but two catholic parishes remained without common schools. Even Croatia and Slavonia were aroused to effort. The number of schools doubled and the attendance increased to nearly thirty per cent., though still over 900 villages with 20,000 children remained without schools. The Jews everywhere were conspicuous for the interest felt by them in the education of their children. Even the previously wholly neglected gipsy tribes (which number 60,000 in Hungary and over 80,000 in Transylvania) were brought to some extent under instruction, the recently more strict enforcement of the domicile and passport laws compelling them to partially lay aside their nomadic habits and engage in settled employments. In Transylvania the improvement of the catholic schools was effected more slowly, owing to the smaller proportion of the catholic population and the slower recovery from the disasters of the civil war. The Szecklers have made a notable advance since 1855, and Klausenburg, Hermannstadt and Cronstadt have emulated the cities of Hungary.

Legislation was at first chiefly limited to reaffirming the "Systema" of 1846 for all the Roman and Greek catholic, Greek, and Jewish schools in all the provinces, excepting Transylvania. In 1851 the text-book system of Western Austria was introduced and new books prepared, or the old ones revised, and in 1854 the gratuitous granting of books to the needy was commenced. Private instruction was discouraged and placed under stricter supervision. In 1853 the establishment of Teachers' Seminaries was undertaken by the government, resulting in the founding of sixteen Roman and one Greek catholic and two Greek schools in the different provinces, besides one for female teachers, and attendance at such an institution was in 1856 made indispensable for newly located teachers, both

male and female. Successive acts were passed assimilating the system of common schools more and more to that of the western provinces and gradually extending the scope of its action, until in 1859 the incorporation of all the above mentioned schools into the one general educational system of the Empire may be considered to have been completed—and though there was no want of complaint of the too direct interference of the civil authorities and of the undue encouragement of the German language, yet the essential improvement in the condition of the schools was generally recognized.

Considering the common school as in the strictest sense a sectarian institution, the government refrained from interfering with the school affairs of the protestants, beyond defining the character of the high school and requiring the permanent settlement of teachers. Forms were prescribed for their appointment only so far as they desired exemption from military service. Earnest endeavors were made in each of the evangelical denominations and in the unitarian to establish a fixed school system, but unsuccessfully. Still, improvements were made and schools and school attendance were increased in the Lutheran communities and to a less extent in the Calvinist. The permanent settlement of the teachers resulted beneficially, but the want of uniformity in the course of study and the inefficient supervision made cooperation difficult.

The statistics of 1858, approximately correct, show that the common schools had increased to 13,106, of which Hungary had 5,323 catholic, 376 Greek, 944 Lutheran, 1,920 Calvinist, and 258 Jewish—the Banat, 529 catholic, 595 Greek, 61 Lutheran, 22 Calvinist, and 43 Jewish—Croatia, 298 catholic, 88 Greek, and 4 Jewish—Transylvania, 830 catholic, 573 Greek, 529 Lutheran, 603 Calvinist, 107 unitarian, and 3 Jewish. The percentage of attendance in the several districts of Hungary was from 41 to 84 per cent. of boys and from 80 to 72 per cent. of girls—in the Banat, 71 per cent. of boys and 41 of girls—in Croatia, 13 per cent.—in Slavonia, 23 per cent.—and in Transylvania 62 per cent. of boys and 48 of girls.

For the regulation of the gymnasiums of Hungary and its former dependencies the "Plan of Organization" of the western provinces was prescribed in 1850, and here the sectarian character was so far made secondary that valid certificates could be issued only by such as were organized essentially in accordance with it. The catholic gymnasiums were soon altered in one way or another so as to conform to its requirements. But as, on the other hand, only a single lower gymnasium of all the protestant institutions consented to adapt itself to the plan, all the rest were in 1851 declared private institutions until a reorganization should be effected. The maturity examination was also introduced, though limited to some extent in the branches included. In 1853, in order to correct the existing want of uniformity, a general course of study was prescribed, and also regulations for the examination of candidates for teacherships. New gymnasiums, as models under the new system, were erected by the State

and provided with able teachers from the western provinces—at Presburg and Ofen in 1852, at Neusohl, Kaschau, and Leutschau in 1853, and at Unghvár in 1854. The course of study provided that the language of the majority of scholars should be chiefly used in instruction in the lower classes, and the German predominantly in the upper gymnasium, or at least in the highest class, for all subjects but religion and the native language, without excluding the latter as an aid. The protestant gymnasia complied but slowly with the requirements of the law and as in 1857 only seven complete and three four-class institutions had completed their reorganization, the rest were deprived of the title of gymnasium, excepting four complete and ten lower gymnasia which promised a speedy change and were simply deprived of the "public right" of granting certificates—as was also the Greek gymnasium at Neusatz.

The elements of opposition to the new system are thus seen to have acted far more powerfully here than in the western provinces. Not only did the representatives of both the protestant sects favor the extreme national party, but it found many supporters among the religious orders. The public feeling was strongly against those gymnasia in which German was exclusively used as the language of instruction, and a preference was expressed even for the mixed German and Latin that had once been usual. Clamors also arose against the introduction of Greek, the system of department teachers, and the overburdening of the scholars. Up to 1859 only three teachers of the religious gymnasia and as many of the protestant had submitted to the prescribed examination. The Ministry finally was induced in that year to allow to the corporation supporting a gymnasium the determination of the language of instruction, still maintaining German as an obligatory study and as the language to be employed in the maturity examination. Less opposition was shown in Transylvania, the Saxon protestants especially favoring the new system.

There therefore remained in 1859, in all the provinces, 90 "public" gymnasia, of which 14 were State institutions, 13 communal, 37 belonging to the religious orders, 10 Lutheran, 11 Calvinist, 3 unitarian, one Greek catholic, and one orthodox Greek. Of these again there were in Hungary 31 complete and 28 lower gymnasia, with 658 teachers and 11,209 students—in the Banat, two complete and three lower gymnasia, with 53 teachers and 1,098 students—in Croatia and Slavonia, four complete and two lower gymnasia, with 78 teachers and 1,047 students—in Transylvania, sixteen complete and six lower gymnasia, with 282 teachers and 4,018 students. At the remaining fifteen private gymnasia there were 127 teachers and 2,269 students. Of the entire number of students, 11,061 were catholic, 1,176 Greek, 5,851 protestant, 250 unitarian, and 1,293 Jewish—as to race, 10,902 were Magyars, 3,239 Germans, 2,626 Slaves, and 1,658 Wallachs.

But, on the other hand, in its measures for promoting real instruction the government met with no hindrance. Until 1848 the only real school in Hungary had been that at Presburg. In 1859 there had been estab-

lished two complete and three lower State real schools, one complete communal school at Pesth, and three lower ones in the Banat, and also two complete and four lower Lutheran schools, with a total of 158 teachers and 2,159 pupils. Many of the teachers were drawn from the western provinces. The language of instruction was principally German—in five schools, to some extent otherwise. To the institution at Pesth there was also attached a trade school similar to that at Vienna, and a course was opened for fitting teachers for the burgher schools.

In October, 1860, the organization of the provinces was restored to its former basis, and the first action on the part of Hungary in respect to public instruction was the restoration of the earlier system of administration. The territory was again divided into five literary districts, over each of which was placed a Director of Education, with two associates, immediately subordinate through the "School Board" to the government, and having under his supervision the catholic and Jewish schools of every grade within his district. The evangelical school districts were left unchanged, coinciding with the four superintendencies of each sect. The Greek schools so far as not exclusively under the control of the episcopal authorities, were under the immediate care of the government.

With all other officials who were not naturalized citizens of Hungary, all "foreign" teachers were required to leave the kingdom before the close of the year 1861. These men, who had devoted themselves indefatigably to the duties of their positions, had been already subjected to much hostility, injustice, and insult, and even natives of Hungary who had favored the school reform, lost their influence and preferred to leave the kingdom, at least temporarily. For the common schools, meanwhile, the existing regulations were nominally retained, but for the gymnasiums a convention of teachers met at Ofen in August, 1861, by whom a new course of study was prepared, which was however not carried into operation. A provisional organization was prescribed by the government in October of the same year, which was shortly afterwards confirmed. By this, class teachers were again employed in the two lower classes, the same teacher giving instruction in all the branches of his class. The department system of teachers commenced with the third class. As to the language of instruction, the gymnasium became either exclusively Magyar, or mixed—some other native language being employed in the latter, conjointly with the Magyar, commencing with the third class, or earlier if expressly desired by the parents. Instruction in German is obligatory even in the purely Magyar schools, and wherever the population belongs to different races the native tongue of each is made an obligatory study. Great stress is still laid upon the Latin language, to which forty-five hours weekly are given in all the eight classes, while mathematics receives but seventeen, and Greek in the upper gymnasium but six. The other branches are geography and history, natural history, physics, and philosophy. The total number of hours per week is from eighteen to twenty-three in each class. In August, 1862, an examining board for

candidates for gymnasial teacherships was appointed, without whose approval no teacher could be thereafter located, and even those already engaged were required to submit to an examination, those only being excepted who had received a doctorate. A thorough knowledge of the Magyar language is required of all candidates. Essentially the same regulations have been adopted by the evangelical gymnasiums.

In 1863 there were in Hungary ninety gymnasiums—fifty-eight catholic, fourteen Lutheran, fifteen Calvinist, two common to both sects, and one Greek. Twenty-seven of the catholic, five of the Lutheran, and the Greek were lower gymnasiums. Of instructors, 641 were regular teachers, 146 assistants and 137 associate teachers. At the catholic schools, 93 per cent of the directors and 84 per cent of the remaining regular teachers were ecclesiastics—at the evangelical, but twenty-five and sixteen per cent. The number of students was 21,052, distributed very unequally, several gymnasiums having from six to eight hundred, while nineteen had each less than one hundred pupils. In religion, 11,375 were Roman catholic, 917 Greek catholic, 920 Greek, 2,365 Lutheran, 3,739 Calvinist, and 1,733 Jewish. Maturity examinations were held at twenty-six catholic and fourteen evangelical institutions, and of 1,165 students ninety per cent. were approved.

It had soon become evident that the new course of study was separating the gymnasiums of Hungary from those of Western Austria and making it difficult for their students to enter the higher institutions of that country, while it had been so variously understood and applied by the different gymnasiums that there was very little uniformity among themselves. Accordingly, in 1864, the teachers of many of them were consulted respecting a revision of the course and their opinions have been submitted to a commission, who will report to the Educational Council.

In the real schools little change has been made, except that the Magyar element is here also made more prominent and increased importance given to that language and to the geography and history of Hungary. There are four complete and ten lower real schools, of which four are State institutions and the remainder communal, with 140 teachers (of whom but 24 are ecclesiastics,) and 2,185 students—616 German and 1,330 Magyar—1,540 Roman catholic, and 392 Jewish. Four schools average over 300 pupils, and seven have less than 100 each.

Of the present number of common schools in Hungary there are no reliable statistics. It may, however, be said generally that their number has somewhat declined, the communities not being required by law to maintain their schools and therefore permitting them to go to decay—especially in the Northern and Eastern portions among the Ruthenes and Wallachs.

In Croatia and Slavonia the overthrow of the Austrian system was less violent and complete; the foreign teachers were removed more gradually, the school administration was unchanged, and the course of study prepared by the diet of 1861 for all institutions, from the common schools to

the projected university, has remained inoperative. The system therefore of Western Austria, introduced in 1849 for the intermediate schools, still remains essentially in force. The language of instruction is the Croatian, though at all the gymnasiums and at the real school at Agram the German language is an obligatory study—as is also true of the Italian at the real school at Fiume. There are four complete and two lower gymnasiums, with 72 teachers and 1,116 students, of whom 999 are Roman catholic. The real school at Agram has twelve teachers and 119 students. The common schools remain essentially as in 1860. In 1863 there were 23 high and 502 trivial schools. At 202 schools Sunday instruction to adults was also given. The number of pupils was 36,390, the attendance being forty-five per cent. of the boys and forty-three per cent. of the girls. In the language of instruction, 378 were Croat, 7 German, and 140 mixed—in religion, 394 Roman catholic and 115 Greek.

Transylvania severed to a less extent its connection with Western Austria. Of the modification in the gymnasial course of study enacted by the higher authorities of the several denominations and approved by the government, the most important was that making instruction in the geography and history of Transylvania more detailed in its character, and admitting metaphysics and moral philosophy into the two higher classes. The Calvinist institutions varied most from the existing arrangement. The language of instruction at all the Lutheran and at the two principal catholic gymnasiums is German, at the remainder Magyar. At the five complete and two lower Roman Catholic gymnasiums, the one Greek catholic, the six Lutheran, and the one unitarian, there were in 1863, 207 teachers, and 3,170 students, of whom 837 were German, 1,151 Magyar, and 1,120 Wallach—1,707 Roman and Greek catholic, 697 evangelical, 325 unitarian, and 333 Greek and Armenian. Of the complete Greek gymnasium and the six Calvinist, (the gymnasial courses at the four colleges and two distinct gymnasiums,) no statistics are given. Maturity examinations are held at all the complete gymnasiums.

We have little information respecting the real and common schools of Transylvania. The former have retained essentially their earlier organization. The four Lutheran schools have 81 teachers with 358 students. The common schools in the Hungarian and Szeckler districts, left to the care of the communities, have lost much that should have been preserved. A complete census of these was made in 1865.

SCHOOLS FOR ELEMENTARY EDUCATION, IN AUSTRIA, IN 1838.

Countries.	Population in 1838.	Children from 5 to 13 years of age.	Primary Schools.		Repetition Schools.		Sexes attending school.		Total Children at school.	Instructors.			Cost of Schools in Florins.
			No. of Primary Schools.	Children in actual attendance.	No. of Repeti- tion Schools.	Children in actual attend- ances.	Boys.	Girls.		Re- ligious.	Lay.	Total.	
Lower Austria	1,400,000	157,105	1,101	154,179	1,019	58,200	118,891	98,488	212,879	1,127	2,212	3,339	841,007
Upper Austria	846,000	90,376	626	86,485	606	41,435	65,580	62,340	127,920	718	1,114	1,832	185,871
Bohemia	4,173,000	526,569	8,470	494,229	8,431	299,812	376,560	347,481	724,041	1,861	5,781	7,142	475,967
Moravia and Silesia	2,172,000	287,732	1,886	272,638	1,835	177,239	281,826	218,051	449,877	1,399	8,026	4,425	964,706
Galicia	4,728,000	514,308	1,839	67,278	591	30,022	87,065	30,285	97,300	905	2,087	2,942	184,627
Tyrol	830,000	106,439	1,618	107,507	1,191	46,678	80,697	78,483	154,180	1,539	2,185	3,724	101,436
Styria	976,000	101,990	624	76,869	567	35,106	61,468	50,512	111,975	647	967	1,614	99,628
Carynthia and Carniola	764,000	85,538	865	27,817	404	16,805	24,435	20,187	44,622	858	518	876	110,545
Illyrian coast	476,000	59,250	111	9,917	84	8,816	9,588	8,650	18,238	101	228	327	65,738
Lombardy and Venice	8,084,000	588,665	5,178	258,009	280	8,968	191,167	70,808	261,975	8,697	5,905	9,602	856,300
Transylvania	2,026,000	202,600	1,522	51,348	80	720	32,585	19,588	52,068	423	1,507	1,980	60,000
Military Frontier	1,198,000	126,674	1,113	64,560	776	20,908	56,803	29,150	85,458	862	1,266	2,198	180,599
Dalmatia	390,000	39,000	53	8,962	"	"	8,855	607	8,962	46	98	144	19,870
Total	28,652,000	2,886,441	19,586	1,674,788	10,784	664,197	1,814,460	1,024,525	2,838,985	18,183	96,842	40,025	2,795,791

TABLE II.—INSTITUTIONS OF SECONDARY AND SUPERIOR EDUCATION.

	No.	Pro fessors.	Students.	Outlay.	Bursar- ships.	Endow- ments.
UNIVERSITIES.						
Vienna	1	71	4,718	165,671	256	21,583
Gr. rz.	1	28	876	25,372	47	1,967
Innsbruck	1	24	317	25,053	52	3,593
Prague	1	63	3,341	60,864	55	3,065
Olmütz	1	26	640	29,525	112	5,600
Lemberg	1	41	1,403	53,593	48	4,480
Pesth.	1	.....	.....	.....	.....	.....
Pavia.	1	60	1,316	80,221	24	4,300
Padua	1	40	1,260	96,646	.....	.....
Total (without Hungary)....	9	353	13,871	545,545	594	43,788
LYCEA.						
Salzburg, with Theol., Philos., and Medicine	1	20	212	23,465	7	455
Linz " " " "	1	12	167	12,000	10	302
Laibach " " " "	1	23	299	22,160	39	2,294
Klagenfurth " " " "	1	14	171	4,624	26	1,400
Klausenburg " " " "	1	14	330	8,810	.....	.....
In Hungary, 14*	5	83	1,179	71,149	82	4,530
SEMINARIES FOR DIVINES.						
Vienna (Protestant)	1	5	59	17,007	30	2,400
Redemptorists (for their order)	1	6	8	.....	.....	.....
Admont	1	6	8	.....	.....	.....
Mantern	1	7	9	2,650	.....	.....
Tarnow {	2	8	156	4,193	.....	.....
Przemysl {	1	5	31	3,010	.....	.....
Lemberg {	1	9	30	4,765	.....	.....
Carlowitz (Greek Church)	1	7	46	15,128	.....	.....
Zara	1	1	60	180	.....	.....
Hermannstadt (Greek)	1	.....	.....	.....	.....	.....
In Hungary, 2†	10	54	409	46,933	30	2,400
COLLEGES OF PHILOSOPHY‡						
.....	25	166	3,192	127,069	38	2,140
SPECIAL INSTITUTIONS..... { for boys .	31	195	3,508	248,151	163	20,097
	10	29	429	21,775	21	2,036
GYMNASIA§ (Grammar-Schools) { Catholic .	116	899	25,458	505,350	446	20,515
	14	89	2,451	12,963	13	72
.....	198	1,378	35,038	915,328	681	53,850
Total cost of the higher establishments for education, without including Hungary ..	222	1,868	50,497	1,578,955	1,387	104,558

* 2 at Presburg; 2 Raab; 1 Agram, Debreczin, Eperies, Erlau, Grosswardeln, Kismark, Cshau, Oedenburg, Papa, Saros-Patak.

† At Keresztur and Torda.

‡ At Krems, Kremsmunder, Gr. rz. Trent, Budweis, Leitomischl, Pilsen, Brünn, Nikolsburg, Przemysl, Tarnopol, Czernowitz, Zara, Milan, Brescia, Cremona, Mantua, Bergamo, Como, Lodi, Venice, Verona, Udine, Vicenza.

In Hungary, at Stein am Anger and Szegedin, 2.

§ Hungary has 67 Catholic and 13 Protestant Gymnasia.

The Mining Academy at Schemnitz has 7 Professors, 233 Students: it costs 11,500 florins, and has 55 Bursarships endowed with 11,000 florins annually.

IX. SCHOOLS AS THEY WERE IN THE UNITED STATES

SIXTY AND SEVENTY YEARS AGO.

Fifth Article.

VISIT TO DR. DWIGHT'S SCHOOL AT GREENFIELD HILL, FAIRFIELD, CT.*

Boston, July 13th, 1790.

ON my way to this place I stopped at the house of the Rev. Mr. —† in Connecticut. My acquaintance with him began at Cambridge during the late war, and I was very happy to renew it. He now teaches an academy consisting of sixteen boys, most of whom board in his family. He prevailed upon me to rest at his house two days, both of which I spent in the most agreeable manner. I was pleased with the order of his family. His wife is a pleasant, sensible woman, and he has three promising children. But I was principally struck with his manner of *teaching*, and his behavior to his scholars. By particular invitation I went into his school, where I met only six of his boys. The rest were getting their lessons under trees on different parts of his farm. The six boys just mentioned composed a class. They were learning geography. Never did I hear this science taught in such an agreeable manner. The whole class sat down before him, and the lecture was after the manner of a conversation. The teacher entertained them with anecdotes of places, picked up from modern travels, all of which were new to me, and extremely interesting to young people. The class asked him questions, which he answered with ease and politeness. In short, I began to think I saw the father of a family talking to his children, rather than a schoolmaster instructing his boys. After this class was dismissed a second was called, who said a lesson in the same easy manner upon the history of England. A third class concluded the exercises of the forenoon by exhibiting specimens of their skill in a very common and useful species of composition. They had been made to correspond with each other, and their letters were examined with the most scrupulous exactness by their master in grammar, punctuation, the proper place for capitals, and in perspicuity of expression. I recollect he found fault with only one of this class, and that was for not placing dots over the *i* and strokes across the *t* as often as those letters occurred in his performance. Such omissions, he said, betray haste and carelessness, and lead gradually to the writing of a slovenly and unintelligible hand.

On the afternoon of the second day I spent with this excellent man his whole school accompanied him into his meadow, where they assisted him in hauling home his hay, and securing it in his barnyard. In our walk home, after the

* Extract from a letter written "to a friend in Wilmington, Delaware," and published in the Universal Asylum and Columbian Magazine, (Phil.) for Sept., 1790, under the title of "Improved Mode of Education."

† The blank in this letter can probably be filled with the name of Rev. Timothy Dwight, who had the most remarkable private academy in New England, at Greenfield Hill in the town of Fairfield, on the post-road between New York and Boston, between the years 1783 and 1795.

work of the day was over, he gave his boys a lecture upon the different kinds of grasses; he mentioned the time of the first use of each of them in agriculture, the best methods of cultivating them, and the different kinds that were most proper for different animals. The conversation at meals was truly delightful and instructing. It would fill a small volume to mention all the new and useful observations which fell from him at his table, all of which were calculated to improve the understandings, or better the hearts of his pupils. I shall only mention one thing which struck me very agreeably. He read a chapter in the New Testament every morning, and one in the Old Testament every evening, as part of family worship. After reading a chapter in the evening, he explained the meaning of many of the ceremonies of the Jewish church, and showed their fulfillment in the history of our Saviour, or in some of the doctrines of Christianity. The next evening he examined his scholars upon the subject of the preceding lecture. Their answers were extremely pertinent and satisfactory. A better mode could not be devised to instruct young people in the Christian religion, or to furnish them with arguments against the deists.

Before I parted with my kind host, I asked him whether he had adopted the idea of Dr. Franklin, Dr. Rush, and others, respecting the inutility of the dead languages. He told me that he had adopted it in part, but that the prejudices of his countrymen forbade his banishing those languages entirely from his school. He said that he had discovered a new way of teaching them, and that none of his boys ever spent more than two years in learning them. He added, that he thought the time was coming when it would be as absurd to teach the Latin and Greek languages indiscriminately in our schools, as it would now be to navigate a vessel by coasting instead of a magnet. * * *

"BOARDING ROUND" IN VERMONT.

We make the following extract from a little pamphlet, illustrative of the life of a country schoolmaster in Vermont, when "boarding round" was practiced.

Monday.—Went to board at Mr. B——'s; had a baked gander for dinner; suppose from its size, the thickness of the skin and other venerable appearances, to have been one of the first settlers of Vermont; made a slight impression on the patriarch's breast. Supper—cold gander and potatoes; family consisting of the man, good wife, daughter Peggy, four boys, Pompey the dog, and a brace of cats; fire built in the square room about nine o'clock, and a pile of wood lay by the fireplace; saw Peggy scratch her fingers, and couldn't take the hint; felt squeamish about the stomach, and talked of going to bed; Peggy looked sullen, and put out the fire in the square room; went to bed, and dreamed of having eaten a quantity of stone wall.

Tuesday.—Cold gander for breakfast, swamp tea and some nut cake—the latter some consolation. Dinner—the legs, &c., of the gander, done up warm—one nearly dispatched. Supper—the other leg, &c., cold; went to bed as Peggy was carrying in the fire to the square room; dreamed I was a mud turtle, and got on my back and could not get over again.

Wednesday.—Cold gander for breakfast; complained of sickness, and could eat nothing. Dinner—wings, &c., of the gander warmed up; did my best to destroy them, for fear they should be left for supper; did not succeed; dreaded supper all the afternoon. Supper—hot Johnny cakes; felt greatly revived; thought I had got clear of the gander, and went to bed for a good night's rest; disappointed; very cool night, and couldn't keep warm in bed; got up and stopped the broken window with my coat and vest; no use; froze the tip of my nose and one ear before morning.

Thursday.—Cold gander again; felt much discouraged to see the gander not half gone; went visiting for dinner and supper; slept abroad, and had pleasant dreams.

Friday.—Breakfast abroad. Dinner at Mr. B——'s; cold gander and hot potatoes—the latter very good; ate three, and went to school quite contented. Supper—cold gander and no potatoes, bread heavy and dry; had the headache and couldn't eat; Peggy much concerned; had a fire built in the square room, and thought she and I had better sit there out of the noise; went to bed early; Peggy thought too much sleep bad for the headache.

Saturday.—Cold gander and hot Indian Johnny cake; did very well, glad to come off so. Dinner—cold gander again; didn't keep school this afternoon; weighed and found I had lost six pounds the last week; grew alarmed; had a talk with Mr. B——, and concluded I had boarded out his share.

REMINISCENCES OF SCHOOLS AND TEACHERS IN WILMINGTON, DELAWARE.

The following extracts from Miss Elizabeth Montgomery's "Reminiscences of Wilmington," (Del.), published in 1851, were copied and forwarded by Miss M. S. Gilpin:—

The next place of note was an humble Methodist meeting-house, founded by a meek and lowly people, who would shudder at the Popish name of a *church*, though they did decorate it with evergreens on Christmas, and kept the day as a religious festival. It has been so often enlarged that hardly a relic of the original is left. Now it can vie with many buildings in large cities, and is called "Ashbury Church."

We must not pass this primitive place of worship without a tribute of respect to John Thelwell, its devoted patron from its early dawn, and (with his worthy wife) faithful unto death. It would be easier for us to say what he did not than to recount his numerous duties. He was a ruler, an exhorter, and an efficient class-leader with these people. He was clerk of the market too, and once he weighed a woman's butter which was wanting in balance, and was about to take away the basket. She being near-sighted, and he having but one eye, she took the advantage by daubing a pound in the other eye, and thus made off with her effects.

He held the office of bell-man from time immemorial as crier. Many at this day remember Daddy Thelwell and his big bell, tingling as he passed, and warning the burghesses to attend their meeting in the little town chamber over the end of the lower market-house. Those are yet living who heard the joyful sound of his old bell ringing in their ears, arousing them from repose, his voice echoing loud and long, "Cornwallis is taken!" Could you believe, after being faithful to all these duties, he should be a schoolmaster, and of some note, too!

The more ancient hornbook, scarcely now remembered, became out of use in this country, and ceased to be imported from England when we undertook to teach ourselves learning after the Revolution. It was soon below our expectations, for it only contained the alphabetic letters, the numerals and the Lord's Prayer. These, fastened on a small thin board, about the size of a small spelling-book page, were securely nailed to it with a strip of bright brass for a margin, and covered with a plate of horn so transparent as to render the text clearly to be read, yet fully defended from the unwashed fingers of the pupils. One of the British poets has immortalized this elementary guide to all the future learning of our advanced age:

Hail, ancient book, most venerable code,
Learning's first cradle and its last abode;
The huge unnumber'd volumes which we see,
By lazy plagiarists are stolen from thee;

But future times to thy sufficient store
 Shall ne'er presume to add one letter more.
 Thee will I sing in homely wainscot bound,
 The golden verge encompassing around,
 The faithful *horn* in front from age to age
 Preserving thy invaluable page.

But the intruding successor to teach the alphabet, spelling, reading and grammar, was Dilworth's spelling-book, with small print, like worn out newspaper type. The present generation would not now study such dim lights.

At the foot of Quaker Hill Mr. Thelwell had commenced teaching, but was soon promoted to the little senate chamber over the market-house, and this, at the corner of King and Third streets, was long his room. Most boys and girls were his pupils, at least during a part of their school-days. The boys' entrance was front, the girls' up an alley. Even in those *primitive days* there were some unruly children; but he adhered most strictly to the letter of Solomon's advice, and "never spared the rod." The rattan or ferule seemed to be in perpetual motion, and were as common in his seminary as gymnastics at this day, and woe to the boy mounted to receive the reward of his exploits or omissions! But wondrous strange if after such an exhibition he should return to school subdued. It can only be accounted for, that independence was not fully understood in the young Republic. Certainly it was not carried out as in this day.

The Bible was used for the senior class, and also Gough's Arithmetic, with sums in simple division that would fill a large slate, and puzzle many a brain, and cause showers of tears. This school was opened every morning by prayer and singing a hymn.

The village all declared how much he knew;
 'Twas certain he could write and cipher too;
 Lands he could measure, times and tides presage,
 And e'en the story ran that he could guage.
 But past is all his fame. The very spot
 Where many a time he triumphed is forgot.

Miss Debby Thelwell, the eldest daughter, assisted and kept the girls in order; she was a very worthy woman, but with no literary pretensions. Miss Polly rarely entered; she was timid and more refined. After the father's death the sisters united and taught young children for many years, until this worthy family were removed by death from useful employment.

On the northeast corner of Second street was a school of long standing for girls—

There, in her noisy mansion, skilled to rule,
 The village mistress taught her little school;
 Well had the boding tremblers learned to trace
 The day's disasters in her morning face.

Mrs. Elizabeth Way was a celebrated teacher of needle-work, so important for misses in those times that even the art of shirt-making was strictly attended to, and fitting and cutting were taught here with neatness and care. Most of the older females, brought up in this town, have been her pupils.

Mrs. Way was a very respectable and worthy woman; she had received an education superior to most women of her day, and was endowed with a strong mind and strict principles of morality, yet an irritable temper was a drawback to her usefulness, and it was annoying to some of her pupils. She was a disci-

plinarian of the old school, and strictly adhered to the wise king's advice. A bunch of switches or cat-o'-ninetails were freely used to correct the naughtiness.

Leather spectacles were worn for slighted work. Much attention was paid to the position, for if the head leaned down, Jamestown-weed burs strung on tape were ready for a necklace, or if a person stooped, a steele was at hand. This was the length of the waist, and held up the chin by a piece extending round the neck, and a strap confined it down. It was not very comfortable to the wearer, though fitted to make the "crooked ways straight," but a morocco spider worn on the back, confined to the shoulders by a belt, was more usual.

The celebrated painter, Benjamin West, had been the companion of Mrs. Way's childhood and youth. As absent friends, they kept up a correspondence in age, and it seemed much pleasure to her to relate anecdotes of his early days.

Isaac Hendrickson, of Swedish descent, and then one of the most respectable shipping merchants, married her only daughter, a handsome and lovely woman, and highly esteemed. He owned the opposite corner where they lived. Mrs. Way was aged, and had declined teaching to live with her daughter. Her only son, a young physician, was also an inmate of this family. Mrs. H. and the Doctor both fell victims to the yellow fever of 1798. This sore calamity "brought down her gray hairs in sorrow to the grave."

SCHOOL LIFE IN RHODE ISLAND.

Dr. Channing thus describes the discipline of the dame school of his boyhood in Newport, R. I., (1780-1794:)

"I was a little amused with the objection which you say the —s made to your proposed school, that you want those essential qualifications of a teacher —gray hairs and spectacles. This objection brought back to my mind the venerable schoolmistress under whose care my infant faculties were unfolded. She, indeed, would have suited the —s to a hair. Her nose was peculiarly privileged and honored, for it bore *two* spectacles. The locks which strayed from her close mob-cap were most evidently the growth of other times. She sat in a large easy-chair, and, unlike the insect forms of modern days, she filled the capacious seat. Her title was *Madam*, a title which she exclusively enjoyed. When we entered her door we kissed our hands, and *Madam* was the first word which escaped our lips. But I would not have you suppose that there was nothing but a title, and spectacles, and gray locks to insure our respect. *Madam* was wiser than the —s. She did not trust chiefly to age. On the right arm of her easy-chair there reclined what to common eyes appeared only a long, round stick; but so piercing was its vision, so quick its hearing, so rapid its motions, so suddenly did it reach the whispering or idle delinquent, that Ovid, had he known it, would have been strongly tempted to trace it, by many a strange metamorphosis, back to Argus, or some other watchful, sleepless being of ancient mythology. We, trembling wights, were satisfied with feeling, and had no curiosity to explore its hidden properties. Do you ask where this mysterious wand is to be found? I fear it is irrecoverably lost. The storm of revolution, which has so lately passed over us, not contented with breaking the sceptres and hurling down the thrones of monarchs, burst into the school-room, and *Madam's* title and rod were swept away in the general desolation."

As he grew older William was advanced to the boarding and day school of Mr. Rogers, which was considered the best in the town, and indeed had so high a reputation, that boys from a distance, especially from the South, were sent to his charge. It was the habit of that time to use flogging as the common penalty, and no master would then have responded, as all good ones must now do, to the words of Vogel:—"When we teachers become fully competent to our work the necessity of corporeal punishment will cease altogether." This is

mentioned because it is certain that what he then experienced outraged his sensitive honor, and served to arouse the feeling of indignation against any form of violence used toward children which grew so strong in him in later years. He would often tell an anecdote of a little boy in school trying to shield with his arms a larger one whom the master was about to whip. The contrast of the great heart with the small physical power, the noble position of the young remonstrant against tyranny, produced an indelible impression upon his childish imagination, and made the severity of the teacher and the quarreling of the children detestable and hideous.*

Judge Story, in a letter to the biographer of Dr. Channing on the influence which surrounded that eminent man in his college career at Harvard between 1794 and 1798, writes:

You express a desire "to obtain some general views of the circumstances under which the students lived." I believe that this can be best done by giving you a brief sketch of the state of college, and the relation which the students had with the existing college government. Things are so much changed since that it is somewhat difficult to realize all the influences which then surrounded them. In the first place as to the course of studies. It was far more confined and limited than at present. In Greek we studied Xenophon's *Anabasis* and a few books of the *Iliad*; in Latin, Sallust and a few books of Livy; in Mathematics, Saunderson's *Algebra* and a work on *Arithmetic*; in Natural Philosophy, Enfield's *Natural Philosophy* and Ferguson's *Astronomy*; in Rhetoric, an abridgment of Blair's *Lectures* and the article on *Rhetoric* in the "Preceptor;" in Metaphysics, Watt's *Logic* and Locke on the Human Understanding; in History, Millot's *Elements*; in Theology, Doddridge's *Lectures*; in grammatical studies, Lowth's *Grammar*. I believe this is near the whole, if not the whole, course of our systematical studies. The college library was at that time far less comprehensive and suited to the wants of students than at present. It was not as easily accessible, and, indeed, was not frequented by them. No modern language was taught except French, and that only one day in the week by a non-resident instructor.

The means of knowledge from external sources was very limited. The intercourse between us and foreign countries was infrequent, and I might almost say that we had no means of access to any literature and science except the English. Even in respect to this we had little more than a semi-annual importation of the most common works, and a few copies supplied and satisfied the market. The English periodicals were then few in number, and I do not remember any one that was read by the students except the *Monthly Magazine*, (the old *Monthly*), and that was read but by a few. I have spoken of our semi-annual importations, and it is literally true, that two ships only plied as regular packets between Boston and London, one in the Spring and one in the Autumn, and their arrival was an era in our college life.

In respect to academical intercourse the students had literally none that was not purely official except with each other. The different classes were almost strangers to each other, and cold reserve generally prevailed between them. The system of "fagging" (as it was called) was just then dying out, and I believe that my own class was the first that was not compelled to perform this drudgery at the command of the Senior class in the most humble services. The students had no connection whatsoever with the inhabitants of Cambridge by private social visits. There was none between the families of the president and professors of the college and the students. The *régime* of the old school in manners and habits then prevailed. The president and professors were never approached except in the most formal way and upon official occasions; and in the college yard (if I remember rightly) no student was permitted to be with his hat on if one of the professors was there.

* *Memoir of William Ellery Channing*, Vol. I, p. 44.

VII. ENGLISH PEDAGOGY—OLD AND NEW.

CHARLES HOOLE.

CHARLES HOOLE, an eminent schoolmaster in his day, and the author of at least twenty-four contributions to the pedagogical literature of the English language, was born in Wakefield, Yorkshire, in 1610. After receiving his elementary training in the free school of his native place under Robert Doughtie, a Cantabrigian of high reputation, he proceeded at the age of eighteen to Lincoln College, Oxford, on the advice of his kinsman, Dr. Robert Sanderson, where he earned the reputation of a superior scholar in the Latin, Greek and Hebrew languages, and in philosophy. After receiving the degree of bachelor of arts, he commenced teaching in 1633 in Lincolnshire, and in Rotherham, Yorkshire, and acquired from the start considerable note in his vocation, and about 1649 he was invited to London by several noted citizens to start a private grammar school, first in Redcross Lane, and afterward (1651) in Token House Garden in Lothbury near the Royal Exchange, where, according to Wood, "the generality of the youth under him were instructed to a miracle." He afterward removed to Montmouthshire on the urgent request of some of his old London patrons, but not being satisfied with the result, he accepted a prebendship in the church in Lincoln offered him by Bishop Sanderson, and soon after became rector of Stock Billerica, near Chelmsford in Essex, where he died March 7, 1686, and "was buried in the chancel of the church, under an arch in the wall, near the communion table," according to Wood.

Mr. Hoole published in 1633 "*Pueriles Confabulationunculæ, &c.*;" in 1637 he composed "*The Usher's Duty; or a Platform of Teaching Lily's Grammar,*" and "*The New Discovery of the Old Art of Teaching,*" which were printed in 1659, together with a little treatise entitled "*The Petty-Schoole*"—which together throw more light on the old and the improved methods of teaching, than any one publication of that period which has come to our notice. In 1653 he published "*Phraseological Pueriles, &c.*;" and in 1654 his "*Grammar in Latin and English in four parts,*" first intended

for the use of his private grammar school, but which passed through several editions on the recommendation of Dr. Sanderson and others, of being "the shortest, orderliest, and plainest, for ease both of master and scholars, that has been then extant."

Hoole was one of the pioneer educators of his century; with others, he labored to improve the elementary school by composing and publishing a "Plain and Easy Primer for Children wherein the Pictures of Beasts and Birds for each Letter in the Alphabet are set down, &c.," and by translating and publishing in 1659 the "*Orbis Sensualium Pictus*" of Comenius, under the title of "The Visible World; or a Picture or Nomenclature of all the Chief Things that are in the World, and of Men's Employments therein"—"adorned with pictures, to make children understand it the better." The preface anticipates many of the arguments advanced two hundred years later in favor of Object Teaching, as will be seen by these extracts.

The Cultivation of Perception and Conception.—"The ground of this business is, that sensual objects may be rightly presented to the senses, for fear they may not be received. I say, and say it again aloud, that this last is the foundation of all the rest. Now there is nothing in the understanding which was not before in the sense; and therefore to exercise the senses well about the right perceiving the differences of things, will be to lay the grounds for all wisdom and all wise discourse; which, because it is commonly neglected in schools, and the things which are to be learned are offered to scholars without being understood or being rightly presented to the senses, it cometh to pass that the work of teaching and learning goeth heavily onward, and affordeth little benefit."

The Understanding to be cultivated as well as the Memory.—"For to pack up many words in memory, of things not conceived in the mind, is to fill the head with empty imaginations, and to make the learner more to admire the multitude and variety, and thereby to become discouraged, than to care to treasure them up, in hopes to gain more knowledge of what they mean. Descend to the very bottom of what is taught, and proceed as nature itself doth, in an orderly way; first, to exercise the senses well, by representing their objects to them, and then to fasten upon the intellect, by impressing the first notions of things upon it, and linking them one to another by a rational discourse. Missing this way, we do teach children as we do parrots, to speak they know not what."

Lessons with real Objects.—"Since some things can not be *pictured out* with ink, for this reason it were to be wished, that things rare, and not easy to be met with withal at home, might be kept ready in every great school, that they may be showed also, as often as any words are to be made of them to the scholars. Thus at last this school would indeed become a school of things obvious to the senses, and an entrance to the school intellectual." Is not the germ of Pestalozzianism here? The words "*pictured out*" are put in italics by ourselves to call attention to the old use of this now popular phrase.

Use of Pictorial Illustrations.—"Pictures are the representations of all visible things of the whole world. Such a dross may entice witty children, that they may not conceit a torment to be in the school. For it is apparent that children,

even from their infancy almost, are delighted with pictures. And it will be very well worth the pains to have brought to pass, that scare-crows may be taken away out of Wisdom's gardens."

Use of Blackboard.—But little is said on this piece of school apparatus. It is, however, interesting to know that in a description of a school, written two centuries since, this useful adjunct for illustration is noticed. Comenius says: "Some things are writ down before them with *chalk* on a table. This notice would not have been so satisfactory as it is, but there accompanies the description a "copper cut," and there we see upon the wall a blackboard, as large as a window, with a diagram chalked upon it.

On the point of *illustration* we may add, "The judgment of Mr. Hezekiah Woodward, sometime an eminent schoolmaster in London. Certainly the use of images or representations is great; if we could make our words as legible to children as pictures are, their information therefrom would be quickened and surer. But so we can not do, though we must do what we can."

Masters must have Sympathy with the capacities of the children under Instruction. "A schoolmaster had need to bend his wits to come within the compass of a child's capacities of six or seven years of age, and to make that they may learn with as much delight and willingness, as himself would teach with dexterity and ease. And because any good thing is the better, being the more communicated, I have herein *imitated a child*, who is forward to impart to others what himself has well liked."

Phonic Method of Teaching to Read.—"It will afford a device for learning to read more easily than heretofore, especially having a symbolical alphabet set before it, to wit, the characters of the several letters, with the image of that creature whose voice that letter goeth about to imitate, pictured by it. For the young *a b c* scholar will easily remember the *force* of every character by the very looking at the creature, till the imagination being strengthened by use, can readily afford all things."

It may be necessary to explain, that what Comenius calls the "force of every character" is obtained from *verbs* denoting the actions of animals, instead of from *nouns* as is now the general practice. A series of "copper cuts" is given for this purpose, called "A lively and vocal Alphabet."

Tasks and Training.—"Because the first tasks of learners ought to be little and single, we have filled this first book of *training* one up to see a thing of himself, with nothing but rudiments, that is, with the chief of things and words, or with the grounds of the whole world, and the whole language, and of all our understanding about things." The reader will observe that the word "training" is used in precisely the same sense as by modern educationists.

The Uselessness of bare Rules of Grammar.—"You that have the care of little children, do not trouble their thoughts and clog their memories with bare grammar rudiments, which to them are harsh in getting, and fluid in retaining; because, indeed, to them they signify nothing, but a mere swimming notion of a general term, which they know not what it meaneth, till they comprehend particulars. For rules, consisting of generalities, are delivered, as I may say, at the third hand, presuming first the things and then the words to be already apprehended, touching which they are made."

Teacher's entire Dependence upon God's Blessing.—"And I pray God, the fountain and giver of all wisdom, that hath bestowed upon us this gift of teaching

so to inspire and direct us by his grace, that we may train up children in his fear, and in the knowledge of His Son Jesus Christ our Lord; and then, no doubt, our teaching, and their learning of other things subordinate to these, will by the assistance of His Blessed Spirit make them able and willing to do Him faithful service both in Church and Commonwealth, as long as they live here, that so they may be eternally blessed with Him hereafter. This I beseech you beg for me and mine, as I shall dally do for you and yours, at the throne of God's heavenly grace; and remain while I live ready to serve you, as I truly love and honor you, and labor willingly in the same profession with you.

From my school in Lothbury, London, Jan. 25th, 1658.

CHARLES HOOLE."



THE PETTY SCHOOL.*

BY CHARLES MOOLE, A. M.,

Master of Grammar School at Rotherham in 1636, and of a Private School in London in 1660

CHAPTER I.—*How a child may be helped in the first pronunciation of his letters.*

My aim being to discover the old Art of Teaching School, and how it may be improved in every part suitable to the years and capacities of such children as are now commonly taught, I shall first begin my discourse concerning a Petty School; and here or elsewhere I shall not busy myself or reader about what a child of an extraordinary towardliness, and having a teacher at home, may attain unto, and in how short a space, but only show how a multitude of various wits may be taught all together with abundance of profit and delight to every one, which is the proper and main work of our ordinary schools.

Whereas, then, it is usual in cities and greater towns to put children to school about four or five years of age, and in country villages, because of further distance, not till about six or seven, I conceive the sooner a child is put to school the better it is, both to prevent ill habits which are got by play and idleness, and to inure him betimes to affect learning and well doing. Not to say, how the great uncertainty of parents' lives should make them careful of their children's early education, which is like to be the best part of their patrimony, whatever good thing else they may leave them in this world.

I observe that betwixt three and four years of age a child hath great propensity to peep into a book, and then is the most seasonable time (if conveniences may be had otherwise) for him to begin to learn; and though perhaps then he can not speak so very distinctly, yet the often pronunciation of his letters will be a means to help his speech, especially if one take notice in what organ or instrument he is most defective, and exercise him chiefly in those letters which belong unto it.

Now there are five organs or instruments of speech, in the right hitting of

* The following is a copy of the original title page:—

THE
PETTY-SCHOOLE.
SHewing
A way to teach little
Children to read English with
delight and profit, (espe-
cially) according to
the New Primar.
By C. H.
LONDON,
Printed by F. T. for Andrew Creak
at the Green Dragon in Pauls
Church Yard, 1659.

which, as the breath moveth from within through the mouth, a true pronunciation of every letter is made, viz., the lips, the teeth, the tongue, the roof of the mouth, and the throat; according to which if one rank the twenty-four letters of our English alphabet, he shall find that A, E, I, O, U proceed by degrees from the throat, along betwixt the tongue and the roof of the mouth to the lips contracted, and that Y is somewhat like I, being pronounced with other letters; but if it be named by itself, it requireth some motion of the lips. B, F, M, P, W, and V consonants belong to the lips, C, S, X, Z to the teeth, D, L, N, T, R to the tongue, B, H, K, Q to the roof of the mouth. But the sweet and natural pronunciation of them is gotten rather by imitation than precept, and therefore the teacher must be careful to give every letter its distinct and clear sound, that the child may get it from his voice, and be sure to make the child open his mouth well as he uttereth a letter, lest otherwise he drown or hinder the sound of it. For I have heard some foreigners to blame us Englishmen for neglecting this mean to a plain and audible speaking, saying, that the cause why we generally do not speak so fully as they, proceeded from an ill habit of mumbling, which children got at their first learning to read, which it was their care therefore to prevent or remedy betimes, and so it should be ours, seeing pronunciation is that that sets out a man, and is sufficient of itself to make one an orator.

II.—How a child may be taught with delight to know all his letters in a very little time.

The usual way to begin with a child, when he is first brought to school, is to teach him to know his letters in the hornbook, where he is made to run over all the letters in the alphabet or Christ-cross-row, both forward and backward, until he can tell any one of them which is pointed at, and that in the English character.

This course we see hath been very effectual in a short time with some more ripe-witted children; but others of a slower apprehension (as the most and best commonly are) have been thus learning a whole year together, and though they have been much chid and beaten too for want of heed, could scarce tell six of their letters at twelve months' end, who, if they had been taught in a way more agreeable to their mean apprehensions, (which might have wrought more readily upon the senses, and affected their minds with what they did,) would doubtless have learned as cheerfully if not as fast as the quickest.

I shall therefore mention sundry ways that have been taken to make a child know his letters readily, out of which the discreet teacher may choose what is most likely to suit with his learner.

I have known some that (according to Mr. Brinsley's direction) have taught little ones to pronounce all the letters, and to spell pretty well before they knew one letter in a book; and this they did, by making the child to sound the five vowels, a, e, i, o, u, like so many bells upon his finger's ends, and to say which finger was such or such a vowel, by changes; then putting single consonants before the vowels, (leaving the hardest of them till the last,) and teaching him how to utter them both at once, as *va, ve, vi, vo, vu, da, de, di, do, du*; and again, by putting the vowels before a consonant, to make him say, *as, es, is, os, us, ad, ed, id, od, ud*. Thus they have proceeded from syllables of two or three, or more letters, till a child hath been pretty nimble in the most. But this is rather to be done in a private house than a public school; however this man-

ner of exercise now and then amongst little scholars will make their lessons more familiar to them.

The greatest trouble at the first entrance of children is to teach them how to know their letters one from another when they see them in the book altogether; for the greatness of their number and variety of shape do puzzle young wits to difference them, and the sense can but be intent upon one single object at once, so as to take its impression and commit it to the imagination and memory. Some have therefore begun but with one single letter, and after they have showed it to the child in the alphabet, have made him to find the same any where else in the book till he knew that perfectly; and then they have proceeded to another in like manner, and so gone through the rest.

Some have contrived a piece of ivory with twenty-four flats or squares, in every one of which was engraven a several letter, and by playing with a child in throwing this upon a table, and showing him the letter only which lay uppermost, have in a few days taught him the whole alphabet.

Some have got twenty-four pieces of ivory cut in the shape of dice, with a letter engraven upon each of them, and with these they have played at vacant hours with a child till he hath known them all distinctly. They begin first with one, then with two, afterwards with more letters at once as the child got knowledge of them. To teach him likewise to spell, they would place consonants before or after a vowel, and then join more letters together so as to make a word, and sometimes divide it into syllables, to be parted or put together. Now this kind of letter sport may be profitably permitted among beginners in a school, and instead of ivory, they may have white bits of board, or small shreds of paper or pasteboard, or parchment with a letter written upon each to play withal amongst themselves.

Some have made pictures in a little book, or upon a scroll of paper wrapped upon two sticks within a box of isinglass, and by each picture have made three sorts of that letter with which its name beginneth; but those being too many at once for a child to take notice of, have proved not so useful as was intended. Some likewise have had pictures and letters printed in this manner on the backside of a pack of cards to entice children, that naturally love that sport, to the love of learning their books.

Some have written a letter in a great character upon a card, or chalked it out upon a trencher, and by telling a child what it was, and letting him strive to make the like, have imprinted it quickly in his memory, and so the rest one after another.

One having a son of two years and a half old, that could but even go about the house, and utter some few gibberish words in a broken manner, observing him one day above the rest to be busied about shells and sticks, and such like toys, which himself had laid together in a chair, and to miss any one that was taken from him he saw not how, and to seek for it about the house, became very desirous to make experiment what that child might presently attain to in point of learning. Thereupon he devised a little wheel, with all the capital Roman letters made upon a paper to wrap round about it, and fitted it to turn in a little round box, which had a hole so made in the side of it, that only one letter might be seen to peep out at once. This he brought to the child, and showed him only the letter O, and told him what it was. The child being overjoyed with his new gambol, catcheth the box out of his father's hand, and runs with

it to his playfellow a year younger than himself, and in his broken language tells him there was "an O, an O." And when the other asked him where, he said, "In a hole, in a hole," and showed it him; which the lesser child then took such notice of, as to know it again ever after from all the other letters. And thus by playing with the box, and inquiring concerning any letter that appeared strange to him what it was, the child learned all the letters of the alphabet in eleven days, being in this A B C character, and would take pleasure to show them in any book to any of his acquaintance that came next. By this instance you may see what a propensity there is in nature betimes to learning, could but the teachers apply themselves to their young scholars' tenuity; and how by proceeding in a clear and facile method that all may apprehend, every one may benefit more or less by degrees. According to these contrivances to forward children, I have published a *New Primer*; in the first leaf whereof I have set the Roman capitals, (because that character is now most in use, and those letters the most easy to be learned,) and have joined therewith the pictures or images of some things whose names begin with that letter, by which a child's memory may be helped to remember how to call his letters, as A for an ape, B for a bear, &c. This hieroglyphical device doth so affect children, (who are generally forward to communicate what they know,) that I have observed them to teach others, that could not so readily learn, to know all the letters in a few hours' space, by asking them what A stands for? and so concerning other letters backward and forward, or as they best liked.

Thus when a child hath got the names of his letters, and their several shapes withal in a playing manner, he may be easily taught to distinguish them in the following leaf, which containeth first the greater and then the small Roman characters, to be learned by five at once or more, as the child is able to remember them; other characters I would have forborne till one be well acquainted with these, because so much variety at the first doth but amaze young wits, and our English characters (for the most part) are very obscure, and more hard to be imprinted in the memory. And thus much for learning to know letters; we shall next (and according to order in teaching) proceed to an easy way of distinct spelling.

III.—*How to teach a child to spell distinctly.*

The common way of teaching a child to spell is, after he knows the letters in his alphabet, to initiate him in those few syllables, which consist of one vowel before a consonant, as *ab, eb, ib, ob, ub*, &c., or of one vowel after a consonant, as *ba, be, bi, bo, bu*, &c., in the hornbook, and thence to proceed with him by little and little to the bottom of the book, hearing him twice or thrice over till he can say his lesson, and then putting him to a new one.

In which course I have known some more apt children to have profited pretty well, but scarce one of ten, when they have gone through the book, to be able to spell a word that is not in it. And some have been certain years daily exercised saying lessons therein, who, after much endeavor spent, have been accounted mere blockheads, and rejected altogether as incapable to learn any thing; whereas, some teachers that have assayed a more familiar way, have professed that they have not met with any such thing as a dunce amid a great multitude of little scholars.

Indeed, it is Tully's observation of old, and Erasmus' assertion of later years,

that it is as natural for a child to learn, as it is for a beast to go, a bird to fly, or a fish to swim, and I verily believe it; for the nature of man is restlessly desirous to know things, and were discouragements taken out of the way, and meet help afforded young learners, they would doubtless go on with a great deal more cheerfulness, and make more proficiency at their books than usually they do. And could the master have the discretion to make their lessons familiar to them, children would as much delight in being busied about them, as in any other sport, if too long continuance at them might not make them tedious.

Amongst those that have gone a readier way to reading, I shall only mention Mr. Roe and Mr. Robinson, the latter of whom I have known to have taught little children not much above four years old to read distinctly in the Bible, in six weeks' time or under; their books are to be had in print, but every one hath not the art to use them. And Mr. Coote's *English Schoolmaster* seems rather to be fitted for one that is a master indeed than for a scholar.

Besides the way then which is usual, you may (if you think good) make use of that which I have set down in the *New Primer* to help little ones to spell readily, and it is this:

1. Let a child be well acquainted with his vowels, and made to pronounce them fully by themselves, because they are able to make a perfect sound alone.

2. Teach him to give the true value or force of the consonants, and to take notice how imperfectly they sound, except a vowel be joined with them. Both these are set apart by themselves.

3. Proceed to syllables made of one consonant set before a vowel, (section 5,) and let him join the true force of the consonant with the perfect sound of the vowel, as to say *ba, be, bi, bo, bu, &c.* Yet it were good to leave *ca, ce, ci, co, cu,* and *ga, ge, gi, go, gu,* to the last, because the value of the consonant in the second and third syllables doth differ from that in the rest.

4. Then exercise him in syllables made of one vowel set before one consonant, (section 6,) as to say *ab, eb, ib, ob, ub, &c.* till he can spell any syllable of two letters backward or forward, as *ba, be, bi, bo, bu; ab, eb, ib, ob, ub; ba, ab; be, eb; bi, ib; bo, ob; bu, ub;* and so in all the rest, comparing one with another.

5. And if to any one of these syllables you add a letter, and teach him how to join it in sound with the rest, you will make him more ready in spelling; as if before *ab* you put *b*, and teach him to say *bab*; if after *ba* you put *d*, and let him pronounce it *bad*, he will quickly be able to join a letter with any of the rest, as *nip, pin, but, tub, &c.*

To inure your young scholar to any, even the hardest syllable, in an easy way,

1. Practice him in the joining of consonants that begin syllables (section 7) so that he may give their joint forces at once; thus

Having showed him to sound *bl* or *br* together, make him pronounce them, and a vowel with them, *bla, bra, ble, bre,* and so in any of the rest.

2. Then practice him likewise in consonants that end syllables, (section 8;) make him first to give the force of the joined consonants, and then to put the vowels before them; as *ble* with the vowels before them sound *able, eble, tble, oble, uble,* to all of which you may prefix other consonants and change them into words of one syllable, as *fable, peble, bible, noble, bubble,* with a *b* inserted or the like. Where observe that *e* in the end of many syllables, being silent, doth qualify the sound of the foregoing vowel, so as to make words different from

those that have not *e*; as you may see *made* differeth quite from *mad*, *bete* from *bet*, *pipe* from *pip*, *sope* from *sop*, and *cube* from *cub*. Whereby I think them in an error that leave out *e* in the end of words, and them that in pronouncing it make two syllables of one, in *stable*, *bible*, *people*, &c., which judicious Mr. Mulcaster will not allow.

In this exercise of spelling you may do well sometimes to make all the young beginners stand together, and pose them one by one in all sorts of syllables, till they be perfect in any; and to make them delight therein,

1. Let them spell many syllables together which differ only in one letter, as *and*, *band*, *hand*, *land*, *sand*.

2. Teach them to frame any word of one syllable, by joining any of the consonants which go before vowels, with those that are used to follow vowels, and putting in vowels betwixt them, as *black*, *block*; *clack*, *clock*.

And this they may do afterward amongst themselves, having several loose letters made and given them to compose or divide in a sporting manner, which I may rightly term the letter sport.

When a child has become expert in joining consonants with the vowels, then take him to the diphthongs, (section 9,) and there

1. Teach him the natural force of a diphthong, (which consists of two vowels joined together,) and make him sound it distinctly by itself, as *ai*, *ei*, &c.

2. Let him see how it is joined with other letters, and learn to give its pronunciation with them, minding him how the same diphthong differs from itself sometimes in its sound, and which of the two vowels in it hath the greatest power in pronunciation, as in *people*, *e* seemeth to drown the *o*.

And besides those words in the book, you may add others of your own, till by many examples the child doth well apprehend your meaning, so that he can boldly adventure to imitate you, and practice himself.

Thus after a child is thoroughly exercised in the true sounding of the vowels and consonants together, let him proceed to the spelling of words, first of one syllable, (section 10,) then of two, (section 11,) then of three, (section 12,) then of four, (section 13,) in all of which let him be taught how to utter every syllable by itself truly and fully, and be sure to speak out the last. But in words of more syllables, let him learn and part them according to these profitable rules:

1. An English syllable may sometimes consist of eight letters, but never of more, as *strength*.

2. In words that have many syllables, the consonant between two vowels belongeth to the latter of them, as *hu-mi-li-tie*.

3. Consonants which are joined in the beginning of words are not to be parted in the middle of them, as *my-ste-ry*.

4. Consonants which are not joined in the beginning of words are to be parted in the middle of them, as *for-get-ful-ness*.

5. If a consonant be doubled in the middle of a word, the first belongs to the foregoing syllable, and the latter to the following, as *pos-ses-si-on*.

6. In compound words, every part which belongeth to the single words must be set by itself, as *in-a-bi-li-ty*.

And these rules have I here set down to inform the less skillful teacher how he is to guide his learner, than to puzzle a child about them, who is not yet so well able to comprehend them.

I have also divided those words in the book, to let children see how they ought to divide other polysyllable words, in which they must always* be very careful (as I said) to sound out the last syllable very fully.

To enable a child the better to pronounce any word he meets withal in reading, I have set down some, more hard for pronunciation, (section 14,) in often reading over which he may be exercised to help his utterance; and the master may add more at his own discretion, till he see that his willing scholar doth not stick in spelling any, be it never so hard.

And that the child may not be amused with any thing in his book when he cometh to read, I would have him made acquainted with the pauses, (section 15,) with the figures, (section 16,) numeral letters, (section 17,) quotations (section 18) and abbreviations, (section 19,) which being but a work of a few hours' space, may easily be performed after he can readily spell, which when he can do, he may profitably be put to reading, but not before; for I observed it a great defect in some of Mr. Robinson's scholars, (whose way was to teach to read presently without any spelling at all,) that when they were at a loss about a word, they made an imperfect confused sound in giving the force of the consonants, which if they once missed, they knew not which way to help themselves to find what the word was; whereas, if after a child know his letters, he be taught to gather them into just syllables, and by the joining of syllables together to frame a word, (which as it is the most ancient, so certainly it is the most natural method of teaching,) he will soon be able, if he stick at any word in reading, by the naming of its letters and pronouncing of its syllables, to say what it is, and then he may boldly venture to read without spelling at all, touching the gaining of a habit whereof I shall proceed to say somewhat in the next chapter.

IV.—*How a child may be taught to read any English book perfectly.*

The ordinary way to teach children to read is, after they have got some knowledge of their letters, and a smattering of some syllables and words in the hornbook, to turn them into the A B C or Primer, and therein to make them name the letters and spell the words, till by often use they can pronounce (at least) the shortest words at the first sight.

This method takes with those of prompter wits; but many of more slow capacities, not finding any thing to affect and so make them heed what they learn, go on remissly from lesson to lesson, and are not much more able to read when they have ended their book than when they begun it. Besides, the A B C being now (I may say) generally thrown aside, and the ordinary Primer not printed, and the very fundamentals of Christian religion (which were wont to be contained in those books, and were commonly taught children at home by heart before they went to school) with sundry people (almost in all places) slighted, the matter which is taught in most books now in use is not so familiar to them, and therefore not so easy for children to learn.

But to hold still to the sure foundation, I have caused the Lord's Prayer, (section 20,) the Creed, (section 21,) and the Ten Commandments (section 23) to be printed in the Roman character, that a child having learned already to know his letters and how to spell, may also be initiated to read by them, which he will do the more cheerfully if he be also instructed at home to say them by heart.

As he reads these, I would have a child name what words he can at first sight, and what he can not, to spell them, and to take notice what pauses and numbers are in his lesson, and to go over them often, till he can tell any tittle in them, either in or without the book.

When he is thus well entered in the Roman character, I would have him made acquainted with the rest of the characters now in use, (section 23,) which will be easily done by comparing one with another, and reading over those sentences, psalms, thanksgivings, and prayers (which are printed in greater and less characters of sundry sorts) till he have them pretty well by heart.

Thus having all things which concern reading English made familiar to him, he may attain to a perfect habit of it, 1, by reading *The Single Psalter*; 2. *The Psalms in Meter*; 3. *The School of Good Manners*, or such other like easy books which may both profit and delight him. All of which I would wish he may read over at least thrice, to make the matter as well as the words leave an impression upon his mind. If any where he stick at any word (as seeming too hard) let him mark it with a pin, or the dint of his nail, and by looking upon it again he will remember it.

When he can read any whit readily, let him begin the Bible and read over the book of *Genesis* (and other remarkable histories in other places of Scripture which are most likely to delight him) by a chapter at a time; but acquaint him a little with the matter beforehand, for that will entice him to read it, and make him more observant of what he reads. After he hath read, ask him such general questions out of the story as are most easy for him to answer, and he will the better remember it. I have known some, that by hiring a child to read two or three chapters a day, and to get so many verses of it by heart, have made them admirable proficient, and that betimes, in the Scriptures, which was Timothy's excellency and his grandmother's great commendation. Let him now take liberty to exercise himself in any English book (so the matter of it be but honest) till he can perfectly read in any place of a book that is offered him; and when he can do this, I adjudge him fit to enter into a grammar school but not before. •

For thus learning to read English perfectly, I allow two or three years' time, so that at seven or eight years of age a child may begin Latin.

V.—Wherein children, for whom the Latin tongue is thought to be unnecessary, are to be employed after they can read English well.

It is a fond conceit of many that have either not attained, or by their own negligence have utterly lost the use of the Latin tongue, to think it altogether unnecessary for such children to learn it as are intended for trades, or to be kept as drudges at home, or employed about husbandry. For first, there are few children but (in their playing years, and before they can be capable of any serious employment in the meanest calling that is) may be so far grounded in the Latin as to find that little smattering they have of it to be of singular use to them, both for the understanding of the English authors (which abound now-a-days with borrowed words) and the holding of discourse with a sort of men that delight to flaunt it in Latin.

Secondly, Besides I have heard it spoken to the great commendation of some countries where care is had for the well education of children, that every peasant (almost) is able to discourse with a stranger in the Latin tongue; and why

may not we here in England obtain the like praise if we did but, as they, continue our children at the Latin school till they be well acquainted with that language, and thereby better fitted for any calling.

Thirdly, And I am sorry to add, that the non-improvement of children's time after they can read English any whit well throweth open a gap to all loose kinds of behavior; for being then (as it is too commonly to be seen, especially with the poorer sort) taken from the school, and permitted to run wild, up and down, without any control, they adventure to commit all manner of lewdness, and so become a shame and dishonor to their friends and country.

If these or the like reasons therefore might prevail to persuade them that have a prejudice against Latin, I would advise that all children might be put to the grammar school so soon as they can read English well, and suffered to continue at it till some honest calling invite them thence; but if not, I would wish them rather to forbear it than to become there a hindrance to others, whose work it is to learn that profitable language. And that they may not squander away their time in idleness, it were good if they were put to a writing-school where they might be, first, helped to keep their English by reading a chapter (at least) once a day; and second, taught to write a fair hand; and thirdly, afterward exercised in arithmetic and such preparative arts as may make them completely fit to undergo any ordinary calling. And being thus trained up in a way of discipline, they will afterward prove more easily pliable to their master's commands.

Now, forasmuch as few grammar schools of note will admit children into them till they have learned their *Accidents*, the teaching of that book also becometh for the most part a work for a Petty School, where many that undertake to teach it, being altogether ignorant of the Latin tongue, do sorrowly perform that task, and spend a great deal of time about it to little or no purpose. I would have that book therefore by such let alone and left to the grammar school as most fitting to be taught there only, because it is intended as an introduction of grammar to guide children in a way of reading, writing, and speaking Latin, and the teachers of the grammar art are most deeply concerned to make use of it for that end. And instead of the *Accidents*, which they do neither understand nor profit by, they may be benefited in reading orthodoxal catechisms and other books that may instruct them in the duties of a Christian, such as *The Practice of Piety*, *The Practice of Quietness*, *The Whole Duty of Man*; and afterward in other delightful books, of English history, as *The History of Queen Elizabeth*, or poetry, as *Herbert's Poems*, *Quar's Emblems*; and by this means they will gain such a habit and delight in reading as to make it their chief recreation when liberty is afforded them. And their acquaintance with good books will (by God's blessing) be a means so to sweeten their (otherwise sour) natures, that they may live comfortably towards themselves, and amiably converse with other persons.

Yet if the teacher of a Petty School have a pretty good understanding of the Latin tongue, he may the better adventure to teach the *Accidents*, and proceed in doing so with far more ease and profit to himself and learner, if he observe a sure method of grounding his children in the rudiments of grammar, and preparing them to speak and write familiar Latin, which I shall hereafter discover, having first set down somewhat how to remedy that defect in reading English with which the grammar schools are very much troubled, especially where there is not a good Petty School to discharge that work aforehand. And before I

proceed further, I will express my mind in the next two chapters touching the erecting of a Petty School, and how it may probably flourish by good order and discipline.

VI.—*Of the founding of a Petty School.*

The Petty School is the place where, indeed, the first principles of all religion and learning ought to be taught, and therefore rather deserveth that more encouragement should be given to the teachers of it than that it should be left as a work for poor women, or others whose necessities compel them to undertake it as a mere shelter from beggary.

Out of this consideration it is (perhaps) that some nobler spirits, whom God hath enriched with an overplus of outward means, have, in some places whereunto they have been by birth (or otherwise) related, erected Petty School-houses, and endowed them with yearly salaries; but those are so inconsiderate toward the maintenance of a master and his family, or so overcloyed with a number of free scholars to be taught for nothing, that few men of good parts will deign to accept of them, or continue at them for any while, and for this cause I have observed such weak foundations fall to nothing.

Yet if any one be desirous to contribute toward such an eminent work of charity my advice is, that he erect a school and dwelling-house together, about the middle of a market town, or some populous country village, and accommodate it with a safe yard adjoining to it, if not with an orchard or garden, and that he endow it with a salary of (at least) twenty pounds per annum, in consideration whereof all such poor boys as can conveniently frequent it may be taught gratis, but the more able sort of neighbors may pay for their children's teaching as if the school was not free, for they will find it no small advantage to have such a school amongst them.

Such a yearly stipend and convenient dwelling, with a liberty to take young children to board, and to make what advantage he can best by other scholars, will invite a man of good parts to undertake the charge, and excite him to the diligent and constant performance of his duty, especially if he be chosen into the place by three or four honest and discreet trustees, that may have power also to remove him thence, if by his uncivil behavior or gross neglect he render himself incapable to perform so necessary a service to the church and commonwealth.

As for the qualifications of one that is to be the teacher of a Petty School, I would have him to be a person of a pious, sober, comely and discreet behavior, and tenderly affectionate toward children, having some knowledge of the Latin tongue, and ability to write a fair hand and good skill in arithmetic, and then let him move within the compass of his own orb so as to teach all his scholars (as they become capable) to read English very well, and afterward to write and cast accounts. And let him not meddle at all with teaching the *Accidents*, except only to some more pregnant wits which are intended to be set forward to learn Latin, and for such be sure that he ground them well, or else dismiss them, as soon as they can read distinctly and write legibly, to the grammar school.

I should here have closed my discourse, and shut up this Petty School, were it not that I have received a model for the maintaining of students from a worthy friend's hand, (and one that is most zealously and charitably addicted to advance learning, and to help it in its very beginning to come forward to its

full rise,) by which I am encouraged to address my remaining words to the godly-minded trustees and subscribers for so good a work, (especially to those amongst them that know me and my school endeavors;) and this I humbly request of them, that as they have happily contrived a model for the education of students, and brought it on a sudden to a great degree of perfection, so they should also put to their hands for the improvement of school learning, without which such choice abilities as they aim at in order to the ministry can not possibly be obtained. And for the first foundation of such a work, I presume to offer my advice, that in some convenient places, within and without the city, there may be Petty Schools erected, according to the number of wards, unto which certain poor children out of every parish may be sent and taught gratis, and all others that please to send their children thither may have them taught at a reasonable rate, and be sure to have them improved to the utmost of what they are capable. And I am the rather induced to propound such a thing because that late eminent, Dr. Bathurst, lately deceased, Mr. Gouge, and some others yet living did, out of their own good affection to learning, endeavor at their own charge to promote the like.

VII.—Of the discipline of a Petty School.

The sweet and orderly behavior of children addeth more credit to a school than due and constant teaching, because this speaketh to every one that the child is well taught, though (perhaps) he learn but little, and good manners indeed are a main part of good education. I shall therefore take occasion to speak somewhat concerning the discipline of a Petty School, leaving the further discourse of children's manners to books that treat purposely of that subject, as *Erasmus de moribus*, *Youth's Behavior*, &c.

1. Let every scholar repair to school before eight o'clock in the morning, or in case of weakness before nine; and let him come fairly washed, neatly combed, and handsomely clad, and by commending his cleanness, and showing it to his fellows, make him take pleasure betimes of himself to go neat and comely in his clothes.

2. Let such as come before school-time take liberty to recreate themselves about the school, yet so as not to be suffered to do any thing whereby to harm themselves or school-fellows, or to give offence or make disturbance with any neighbor.

3. When school-time is called, let them all go orderly to their own places, and here apply themselves diligently to their books without noise or running about.

4. When the master cometh into the school, let them stand up and make obeisance, (so likewise when any stranger cometh in;) and after notice is taken of those who are absent, let one that is most able read a chapter, and the rest attend and give some little account of what they have heard read. Then let him that read say a short prayer fitted for the school, and afterward let every one settle to his present task.

5. The whole school may not unfitly be divided into four forms, whereof the first and lowest should be of those that learn to know their letters, whose lessons may be in the *Primer*; the second, of those that learn to spell, whose lessons may be in the *Single Psalter*; the third, of those that learn to read, whose lessons may be in the Bible; the fourth, of those that are exercised in reading, writing, and casting accounts, whose lessons may be in such profitable English books as the parents can best provide and the master think fittest to be taught.

6. Let the lessons be the same to each boy in every form, and let the master proportion them to the meanest capacities; thus those that are abler may profit themselves by helping their weaker fellows, and those that are weaker be encouraged to see that they can keep company with the stronger. And let the two highest in every form give notice to the master when they come to say it, of those that were most negligent in getting the lesson.

7. When they come to say it, let them all stand orderly in one or two rows, and whilst one sayeth his lesson, be sure that all the rest look upon their books, and give liberty to him that is next to correct him that is saying it if he mistake; and in case he can say it better, let him take his place and keep it till the same boy or another win it from him. The striving for places (especially) amongst little ones will whet them on to more diligence than any encouragement that can be given them; and the master should be very sparing to whip any one for his book except he be sullenly negligent, and then also I would choose rather to shame him out of his untowardness by commending some of his fellows, and asking him why he can not do as well as they, than by falling upon him with rating words or injurious blows. A great care also must be had that those children that are slow-witted and of a tender spirit be not any way discouraged, though they can not make so good a performance of their task as the rest of their fellows.

8. On Mondays, Wednesdays and Fridays they may say two lessons in the forenoon and two in the afternoon, and on Tuesdays and Thursdays in the forenoon they may also say two lessons; but on Tuesdays and Thursdays in the afternoon and on Saturday mornings I would have the time spent in examining and directing them how to spell and read aright, and hearing them say the graces, prayers and psalms, and especially the Lord's Prayer, the Creed, and the Ten Commandments, (which are for that purpose set down in the *New Primer*) very perfectly by heart. And those that can say these well may proceed to get other catechisms, but be sure they be such as agree with the principles of Christian religion.

9. Their lessons being all said, they should be dismissed about eleven o'clock, and then care must be taken that they every one go orderly out of the school, and pass quietly home without any stay by the way. And to prevent that too common clamor and crowding out of the school door, let them rise out of their places one by one with their hat and book in their hand, and make their honors to their master as they pass before his face, one following another at a distance out of the school. It were fittest and safest that the least went out the foremost, that the bigger boys following may give notice of any misdemeanor upon the way.

10. The return to school in the afternoon should be by one o'clock, and those that come before that hour should be permitted to play within the bounds till the clock strike one, and then let them all take their places in due order, and say their lessons as they did in the forenoon. After their lessons are ended, let one read a chapter and say a prayer, and so let them again go orderly and quietly home, about five o'clock in the summer and four in the winter season.

11. If necessity require any one to go out in the school-time, let him not interrupt the master by asking him for leave, but let him leave his book with the next fellow above him for fear he should else spoil or lose it, and in case he tarry too long forth, let notice be given to the monitor.

12 Those children in the upper form may be monitors, every one a day in

his turn; and let them every evening, after all the lessons are said, give a bill to the master of their names that are absent, and theirs that have committed any disorder, and let him be very moderate in correcting, and be sure to make a difference betwixt those faults that are viciously enormous and those that are but childish transgressions. Where admonitions readily take place, it is a needless trouble to use a rod, and as for a ferule I wish it were utterly banished out of all schools.

If any one, before I conclude, should ask me, how many children I think may be well and profitably taught (according to the method already proposed) in a Petty School? I return him answer, that I conceive forty boys will be enough to thoroughly employ one man to hear every one so often as is required; and so many he may hear and benefit himself without making use of any of his scholars to teach the rest, which however may be permitted and is practiced in some schools, yet it occasioneth too much noise and disorder, and is no whit so acceptable to parents or pleasing to the children, be the work never so well done. And therefore I advise, that in a place where a great concourse of children may be had, there be more masters than one employed according to the spaciousness of the room and the number of boys to be taught, so that every forty scholars may have one to teach them; and in case there be boys enough to be taught, I would appoint one single master to attend one single form, and have as many masters as there are forms, and then the work of teaching little ones to the height of their best improvement may be thoroughly done, especially if there were a writing-master employed at certain hours in the school, and an experienced teacher encouraged as a supervisor, or inspector, to see that the whole school be well and orderly taught and disciplined.

What I have here written concerning the teaching and ordering of a Petty School was in many particulars experienced by myself with a few little boys that I taught amongst my grammar scholars in London, and I know those of eminent worth and great learning that, upon trial made upon their own children at home and others at school, are ready to attest the ease and benefit of this method; insomuch as I was resolved to have adjoined a Petty School to my grammar school at the Token House in Lothbury, London, and there to have proceeded in this familiar and pleasing way of teaching, had I not been unhandsonely dealt with by those whom it concerned, for their own profit's sake, to have given me less discouragement. Nevertheless, I think it my duty to promote learning what I can, and to lay a sure foundation for such a goodly structure as learning is; and though (perhape) I may never be able to effect what I desire for its advancement, yet it will be my comfort to have imparted somewhat to others that may help thereunto. I have here begun at the very groundwork, intending (by God's blessing) forthwith to publish *The New Discovery of the Old Art of Teaching*, which doth properly belong to a grammar school.

In the meantime I entreat those into whose hands this little work may come to look upon it with a single eye, and whether they like or dislike it, to think that it is not unnecessary for men of greatest parts to bestow a sheet or two at leisure time upon so mean a subject as this seems to be. And that God which causeth immense rivers to flow from small spring-heads, vouchsafe to bless these weak beginnings in tender age, that good learning may proceed hence to its full perfection in riper years.

THE AMERICAN JOURNAL OF EDUCATION.

CLASSIFIED INDEX TO VOLUMES I TO XVI.

CLASSIFIED INDEX TO THE CONTENTS OF BARNARD'S AMERICAN JOURNAL OF EDUCATION—Entire Series, Vol. I. to XVI., with a **GENERAL INDEX** to the first five volumes, (I.-V.,) and a minute *Analytical Index* to each volume, (I.-XVI.;) together with the **CONTENTS** or **INDEX** of other publications by the Editor, including several Treatises made up of articles from successive numbers of the Journal, and intended originally to constitute volumes of 'a Series to be entitled *Papers for the Teacher*, or the **AMERICAN LIBRARY OF EDUCATION**.
D. N. CAMP, *Publisher*, Hartford, 1867. 204 pages. Price \$2.

FIRST SERIES.

THE FIRST SERIES OF THE AMERICAN JOURNAL OF EDUCATION consists of ten volumes, each volume having an average of 700 pages, embellished with at least four portraits, from engravings on steel, of eminent teachers, educators, and promoters of education, and with a large number of wood-cuts illustrative of recent improvements in the structure, furniture, and arrangements of buildings designed for educational uses.

The series, uniformly and neatly bound, with an index to each volume, and a general index to the first five volumes, will be delivered to the order of subscribers, and forwarded by express, or otherwise, as may be directed, at the expense of the persons ordering the same, on the following

TERMS: For the entire series, in parts or numbers,.....	\$30.00
" " " ten volumes, bound in cloth,....	40.00
" " " " bound in leather,....	50.00
For a single volume in cloth,.....	4.50
" " leather,.....	5.50
For a single number.....	1.50

NEW SERIES

A NEW SERIES OF THE AMERICAN JOURNAL OF EDUCATION was commenced with the number for March, 1862, and continued to the close of 1866, making six volumes, having an average of 800 pages each, with sixty portraits from engravings on steel, and over two hundred wood-cuts. These numbers and volumes are sold on the following

TERMS: For a single number, (26 to 45, or 1 to 20, *New Series*). \$1.50
For a single volume, (I., II., III., IV., V., VI., *N. S.*) bound in cloth. 5.00
" " " " " " " " " bound in leather. 5.75

SETS OF THE AMERICAN JOURNAL OF EDUCATION.

A few complete sets of the AMERICAN JOURNAL OF EDUCATION (Vols. I—XVI.) can be had on the following

TERMS: For the entire series, in 45 parts or numbers, with two supplements.....	\$60.00
For the entire series, or sixteen volumes, bound in cloth,....	70.00
“ “ “ “ “ “ bound in half goat,	88.00
“ Classified Index	3.00

All communications relating to single numbers or sets of THE AMERICAN JOURNAL OF EDUCATION may be addressed to

HENRY BARNARD, *Hartford Conn.*



Page 1 of 1

Nathan Bishop



— 100 —

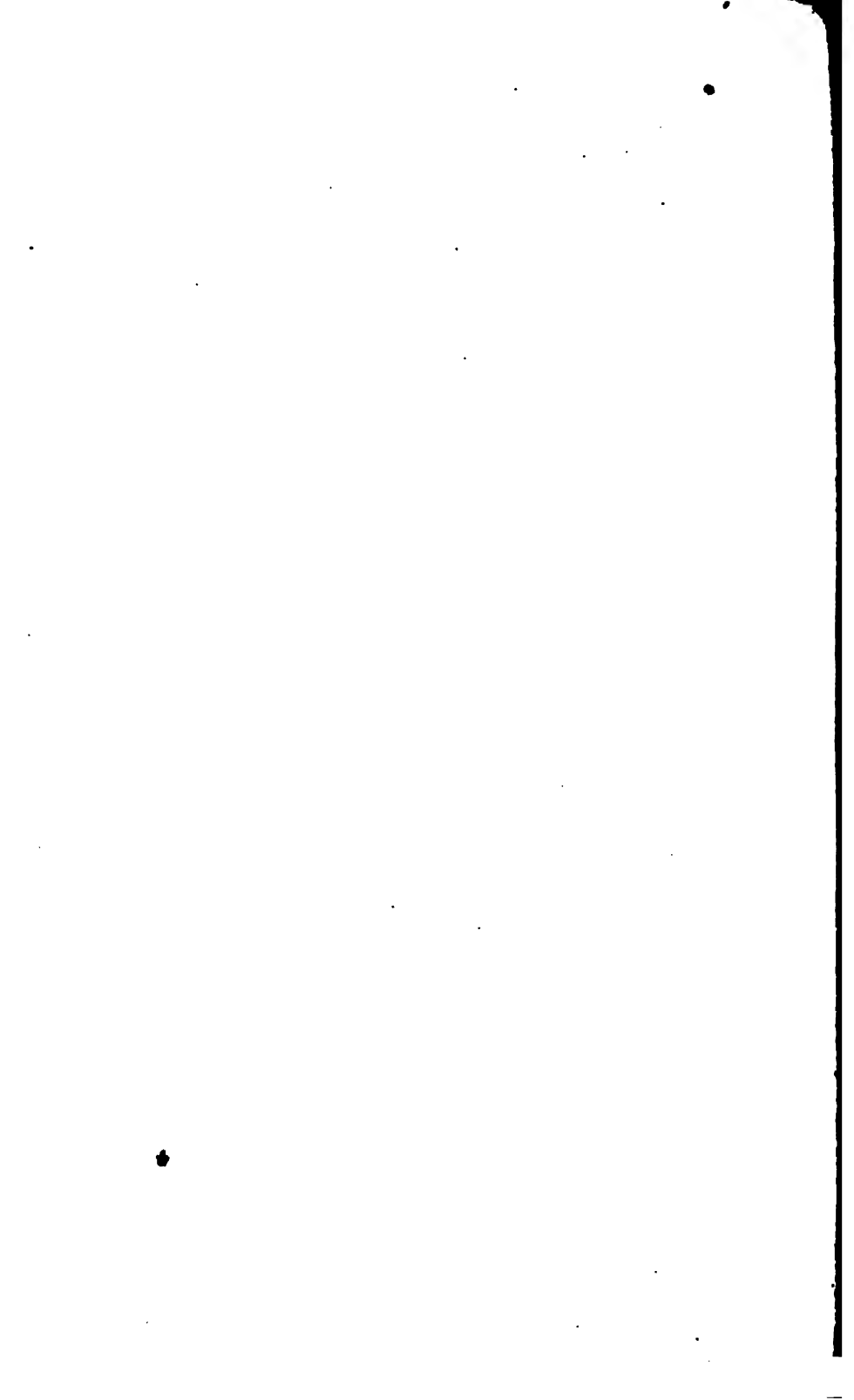
THE American Journal of Education.

[NATIONAL SERIES,]
No. 2.—JANUARY, 1868.

CONTENTS.

	PAGE.
PORTRAIT OF NATHAN BISHOP, LL. D., first Superintendent of Public Schools in Providence, R. I., and in Boston, Mass.,	209
I. THE CLERGY AND POPULAR EDUCATION,	211
Letter from William Chauncey Fowler, LL. D.,	211
✓ II. ENGLISH PEDAGOGY—OLD AND NEW,	223
III. A NEW DISCOVERY OF THE OLD ART OF TEACHING, BY CHARLES HOOLE,	223
Part II. The English Grammar School in 1659,	225
1. The Usher's Duty,	225
2. The Master's Method,	267
3. Scholastic Discipline,	293
✓ IV. ABRAHAM COWLEY, AND REALISTIC INSTRUCTION IN ENGLAND,	325
Mémoir,	325
V. PLAN OF A PHILOSOPHICAL COLLEGE IN 1661, BY A. COWLEY,	327
The College, or Organized Society,	327
Grounds, Building, Equipment,	328
Professors, Scholars, and other Officers,	329
The Schol and Methods of Instruction,	331
Results of Education and Society,	333
ESSAY ON AGRICULTURE IN 1661, BY A. COWLEY,	334
Suggestion of a College of Agriculture,	336
✓ VI. PUBLIC INSTRUCTION IN SWITZERLAND,	337
CANTON OF ZURICH,	337
Territory, Population, Government, School Organization,	337
System of Public Instruction,	338
Compulsory Attendance—School Officers,	338
1. Primary Schools,	341
Elementary School—Real School—Repetition School,	343
Seminary for Teachers of Primary Schools,	345
Teachers' Certificate—Chapters—Synod—Annual Meeting of Teachers' Synod,	346
2. Secondary Schools,	351
3. Superior and Professional Schools,	354
(a) Gymnasium, Lower and Upper,	357
(b) Scientific Industrial School,	358
(c) Veterinary School,	358
(d) Agricultural School,	359
(e) University, or Faculty of Theology, Law, Medicine and Philosophy,	360
CANTONAL NORMAL SCHOOL AT KUSSNACHT,	361
CANTONAL UNIVERSITY AT ZURICH,	366
SWISS FEDERAL POLYTECHNIC UNIVERSITY AT ZURICH,	369
✓ VII. THE PHILOSOPHY AND METHOD OF TEACHING,	381
As Taught at the State Normal School at Westfield, Mass.,	381
✓ VIII. CONDUCT OF THE SEXES,	385
Experience of Oberlin College from 1833 to 1868,	385
Note—Oberlin College,	400
✓ IX. NORMAL SCHOOLS, OR SEMINARIES FOR TEACHERS,	401
Address by John S. Hart, LL. D., Principal of State Normal School, Trenton, N. J.,	401
X. AMERICAN ETNOLOGY,	425
Proposition for a National Society,	427

✂ THE AMERICAN JOURNAL OF EDUCATION, *National Series*, Volume I., for 1867-8, edited by Henry Barnard, LL. D., U. S. Commissioner of Education, is issued quarterly at \$4.00 per annum, (four numbers,) by D. N. CAMP, *Publisher*, Hartford, Conn.





I. THE CLERGY AND POPULAR EDUCATION.

LETTER FROM PROF. WILLIAM C. FOWLER, LL. D.

DURHAM, CONN., December, 1867.

HENRY BARNARD, LL. D.:

Dear Sir:—A few weeks since I had the pleasure of receiving from you a letter, in which you ask me to communicate some facts connected with the common schools in Connecticut "as they were." While I was endeavoring to collect these facts, I met some Gentlemen in Hartford who are active in promoting the educational interests of the Commonwealth; one of whom encouraged me to prepare for the press, some remarks which I made on a topic which came up in that interview. This I consented to do, with the purpose of uniting the two topics in one communication.

But to whom shall this communication be addressed? My mind readily turned to you as a distinguished friend and advocate of popular education who has labored long and successfully in this State and elsewhere, first as a pioneer, and then as a victorious soldier, in this good cause. I feel too assured, that you will welcome every well-meant effort for promoting the same cause, however inadequate it may be.

The topic, last mentioned, is, THE PROVINCE OF THE CLERGY OF CONNECTICUT IN THE PROMOTION OF POPULAR EDUCATION IN THIS COMMONWEALTH.

These remarks and statements, will, I trust, be well received by them, inasmuch as they are in harmony with the views of the clergy of Connecticut from 1635 to the present time.

The proposition which I shall endeavor to sustain, by the following plain arguments, is this, *Ministers of the Gospel in Connecticut ought to take an active part in promoting popular education.*

My first argument in support of this proposition, is derived from *the nature of Christianity.*

It is a religion which addresses accountable beings through their intellect. Just in proportion, therefore, as you improve their intellect by culture, will you enlarge their capacity of being influenced, in their moral instincts, by the objects of divine truth in that religion. Now as christianity is a general provision for the spiritual wants of all mankind, we may be sure, that all classes of the com-

munity ought to experience so much of intellectual culture as will enable them to appreciate and appropriate the full benefit of that provision.

Other religious systems were designed, at least in some of their parts, for certain privileged orders, who should enjoy high mental culture; while the many, the *oi polloi*, were excluded from a full participation. Those systems had their esoteric or secret doctrines, which were communicated to the favored few, the initiated; and their exoteric or superficial doctrines, which were communicated to the common people, who were supposed to be incapable of comprehending those deeper doctrines.

But among christians it is not so. To the poor the Gospel is preached. To them it is given to know the mysteries of the Kingdom. Now in order that this preaching be effectual, in order that these mysteries be adequately comprehended, some degree of mental cultivation is necessary. Evidently, then, it is the duty of the christian minister to promote the intellectual improvement of those whom he wishes to influence by his preaching; for in so doing he is preparing them to understand and appreciate the truths and duties of the Christian religion, and to yield their conscience and their heart to Christ the author of that religion. No christian minister, therefore, is justified in standing aloof from the great cause of popular education; for, without it, the light of the Gospel will shine in darkness, and the darkness will comprehend it not.

In the early period of christian dispensation, the Clergy, the great lights of the catholic church, acted successfully on this principle; though they did not, in the existing social condition, extend it in its application, so far as we can do. They carefully guarded and preserved the learning of the times in which they lived, and, by the establishment of Institutions of learning and religion, helped to keep both, in their intimate association, alive on the earth. They carefully preserved the Greek and Roman classics, the Pandects of Justinian, the Hebrew copies of the Old Testament, and the Greek of the New Testament. Thus it happened, through them, that Classical learning could revive, and that "the public reason of the Romans" could be silently and studiously transfused into the public institutions of Europe, and the study of the Bible could become general. In many an Abbey and University, the lamp of learning, trimmed by their hands, burned brightly, illuminating a wider or a narrower circle, and sending down its cheering light to our times. Honor to whom honor is due. Let all honor be paid to the Catholic church,

as the conservator and promoter of learning and religion. When darkness covered the earth like a flood, during the mediæval centuries, that church was the ark which saved for us the learning and religion of the old world. All thanks to the bright example of her heroic missionaries; for the recorded lives of those eminent saints, who through the long centuries, bore the mingled fruits of learning and holiness, for such as "Pascal who was all reason," and for such as "Fenelon who was all love."

My second argument is derived from *the nature of Protestantism*.

The right of private judgment, in opposition to human claims to a dictatorial authority, in matters of faith, is an essential article in the protestant faith. Now this single fact, that we are to call no man master, is assumed on the ground that the followers of Christ are capable of forming, from the Bible, an opinion for themselves; and in order to form this opinion for themselves, from the study of the bible, they ought at least to be able to read the bible. For how can a man, in the exercise of the right of private judgment, form a correct judgment except on a correct basis, and how can he have a satisfactory basis in the bible, unless he understands that bible?

Besides the acknowledged advantages which they enjoyed in the Catholic church, some of the first reformers desired to enjoy this right of private judgment. They wished to escape from the heavy hand of authority by which they felt themselves humiliated. They were opposed to what was called *carbonaria fides*, "the Collier's faith," or implicit faith. A Collier being asked what he believed on a certain point, replied, "I believe as the church believes." And being asked what the church believes, he replied, "The church believes as I believe." And being asked again what he and the church believe, he replied, "The church and I believe the same thing."

Leading protestants, in opposition to this *carbonaria fides*, undertook to have a faith of their own, and to be able to state the grounds of their faith. In the language of Chillingworth, "the bible, the bible is the religion of protestants." In adopting this for their motto they virtually declared that the common people ought to be elevated to such a level in the scale of mental cultivation, that in the exercise of the right of private judgment in the formation of their opinions from the bible, they would not "wrest it to their own destruction."

The contest on the subject at issue, between Luther and his allies on the one hand, and the Pope and his Cardinals on the other, was like the battle between the gods, as described by Homer, or the battle between angels, as described by Milton. There was great intellec-

tual power and great learning on both sides; and it required intellectual cultivation to judge of the merits of that controversy. Luther translated the bible; but of what use would that be, unless the people could read that translation? Luther, Melancthon and Carolstadius, all men of great learning, delivered lectures in the University of Wittenburg, which helped to enlighten the people and give currency to his doctrines. The revival of classical learning near that time contributed largely to the same effect.

In like manner the Protestant religion of England was permeated with learning, which the Episcopal church there have zealously promoted ever since they took possession of the Catholic schools and universities. Indeed, the leading protestants throughout Europe had been highly educated in the Roman Catholic schools, and were thus disposed to imitate and surpass them in the establishment of such institutions.

Accordingly, in protestant regions, schools of learning soon shone forth on the earth, thick-set as the stars in the sky above. Voetius, a learned protestant, boasted that while in the ten catholic provinces of Belgium there were only two universities, in the ten protestant provinces there were seven.

It is true that what is now understood by popular education was not then thought of as practicable. The Reformers seem not to have supposed it possible that the delights and advantages of learning could be brought down to the lowest stratum of the population. But they adopted principles and measures that are now operating in Germany in the education of the masses, and which justify the clergy here in promoting popular education by direct and efficient means.

My third argument is derived from *the nature of Puritanism*.

Besides the general principles of christianity and of protestantism, the puritans adopted the opinion that the people are capable of *self-government*, both in their civil and in their ecclesiastical polity. This opinion implied that the people should be qualified, by education, to perform the duties involved in self-government. Accordingly, as soon as their circumstances would allow, like the catholics, like the protestants, they adopted measures, both in England and in this country, to establish schools and colleges, under the direction of their learned divines. These had generally been educated in the universities of Oxford and Cambridge. In eleven years after the settlement of Massachusetts, they laid the foundation of Harvard College, to the support of which Connecticut annually contributed. In seventeen years, they established a system of common schools. The clergy, as is

well known, were active in establishing and sustaining these institutions in Massachusetts. As advisors, as patrons, as teachers and visitors, they exerted a controlling and salutary influence.

Without going into an induction of particulars, it is sufficient for my purpose here to say, that the whole history of the puritans shows abundantly, that they have been staunch believers in the value of local law. They have believed that a Church can govern itself better than any outside person or body can govern it; that a Town can govern itself better than a colony or a State can govern it; that the Colony can govern itself better than parliament can govern it; that a State can govern itself better than congress can govern it. But in order to this successful self-government, in these several circles of power, they have also believed that the people must be educated in the school of Christ, and at least, in common schools. On this same belief, the clergy have acted earnestly and efficiently.

Listen to the prayer made by Eliot, the Apostle John, in a synod of ministers in Boston; "Lord, for schools everywhere among us! That our schools may flourish! That every member of this assembly may go home and procure a good school to be encouraged in the town where he lives! That before we die we may be so happy as to see a good school encouraged in every plantation of the country." This was the spirit of the early ministers, and their conduct was in accordance with their spirit.

My fourth Argument is derived from *the nature of the profession* into which ministers have entered.

The object of that profession is to raise the souls of men from their earthly condition into union with the divine nature, that they may thus become the intelligent, and holy, and happy inhabitants of earth and of heaven; to raise them from the power of appetite and passion into the dominion of reason and conscience. This the minister endeavors to accomplish by commending to them the truths of God's holy word illustrated by the teachings of his providence.

In like manner it is the object of popular education to raise men in the scale of knowledge, virtue and happiness, that they become good citizens; to elevate the tastes of the young from sensuality, from the bar and the brandy saloon, from the haunts of loafers and gamblers, into the love and the pursuit of the true, the good and the beautiful. Thus the minister and the educator are largely aiming at the same thing; though the motives employed by the former are always supposed to be chiefly drawn from a higher world, and the motives employed by the latter may be chiefly drawn from

this. The christian minister has, then, every encouragement to act strenuously for the promotion of popular education, with the full belief that while he is promoting that, he is at the same time promoting the object of his own profession.

The minister and the school master are fellow laborers in the same field. The field is the world. When "the school master is abroad," let the minister go forth to meet him and join himself to him as a fellow laborer. Let them encourage each other and bear each other's burdens, both looking forward to "the harvest home," when they shall bring their sheaves with them.

My fifth Argument is derived from *the position occupied by the Clergy of Connecticut during more than two hundred years.*

From the early legislation of the Colonies it appears, that a reason given why schools should be supported, was, namely: that the young could in them be so taught that they would be able to "read the bible" and the "capital laws," and thus be "fitted for service in the church and commonwealth." In the order to establish a free school in 1641, in New Haven, "Our pastor, Mr. *Davenport*," is mentioned with the magistrates, as a committee "to consider what yearly allowance is meet to be given out of the common stock of the town," for the support of the school; and also, "what rules and orders are meet to be observed in and about the same." And, in 1644, the General Court ordered that a grammar school be set up and appointed, and that the "Magistrates and the Teaching Elders" be a committee to attend to that, for the same purposes as in the case of the first mentioned or common school. It appears that Governor Eaton and Mr. *Davenport* were the active men in thus establishing a system of free schools in the Colony.

And after the Colonies were united, the General Court, in 1690, ordered as follows: "This Court considering the necessary and great advantage of good literature, do *order and appoint*, that there shall be two good free schools kept in this Colony, for the schooling of all such children as shall come there after they can distinctly read the psalter, to be taught reading, writing, arithmetic, the Latin and the English languages, the one at Hartford, the other at New Haven, the masters whereof shall be chosen by the magistrates and the *ministers* of the said counties, and shall be inspected and displaced by them, if they see cause." These were grammar schools, after the model of the *free*, or endowed grammar schools of England, in which the Latin and the English languages were to be taught grammatically.

While I thus notice the prominence that was given to the clergy in the establishment of free schools, it should be mentioned that by the original Constitution of Connecticut the "supreme power of the Commonwealth," was lodged in the General Court, which for a long time afterwards gave prominence to the clergy in all matters connected with education.

It should be added that the SCHOOL MASTERS were treated with great consideration from the first. They were among the few at the first, who received the title of "Mr.," and not that of "brother," or "good man." The school master stood next to the minister in the minds of the people; just as he does in Goldsmith's inimitable description in "The Deserted Village":

"And still they gazed, and still the wonder grew,
That one small head could carry all he knew."

He was on familiar terms with the minister, and often derived important aid from him in the government and instruction of his school, and kept him informed as to the proficiency of individual pupils. It is a tradition, that a school master in Guilford from time to time informed the minister, the Rev. Joseph Elliott, that his son, afterwards the celebrated Jared Elliott, was not making much proficiency in his studies. On one occasion, when carrying his book to school, Jared let it fall into the water, and when standing by the fire to dry it, he let it fall into the fire. Upon being reprimanded by the master, he replied, "I believe my book is a lunatic, it is oft in the fire and oft in the water." The school master, as soon as the school was dismissed, hastened to the minister to say to him, "Jared will make a man after all."

Many of the school masters in the principal towns, one at least in each town, made teaching their principal employment through the year, namely, such as Cheever, and Tisdale, and Jones. Other intelligent men taught school in winter, and managed their farms in the summer; one of these, who was born in 1727, told me that, in this way, he taught school thirty years. Others, chiefly young men, often the flower of the town, well educated for the times, and from good families, taught school for a few winters, until they were married. Females, called school mistresses, and school dames, taught the small schools in the summer. Clergymen often taught select schools in the winter, for the older youth in their congregations.

Among these teachers there were indeed those who were but poorly qualified for their employment. Some such are described by John Trumbull, in his "*Progress of Dullness*:"

"He tries, with ease and unconcern,
 To teach what ne'er himself could learn ;
 Gives law and punishment alone,
 Judge, jury, bailiff, all in one ;
 Holds all good learning must depend
 Upon the rod's extremest end,
 Whose great electric touch is such,
 Each genius brightens at the touch.
 With threats and blows, excitements pressing,
 Drives on his lads to learn each lesson ;
 Thinks flogging cures all moral ills,
 And breaks their heads to break their wills."

But there were other school masters who led their pupils gently up the hillside of learning, bearing their burdens, sympathising with their difficulties, and by kind looks, kind tones, and winning ways, gaining their hearts. They did for them what Aristotle did for Alexander the great, who, in return, said, he loved him better than he did his father Philip, for the "latter was only the father of his body, but his teacher was the father of his mind." They did for them what Mr. Elmer, her teacher, did for Lady Jane Grey, who, she said, "taught me so gently, so pleasantly, with such fair allurements to learning, that I think all the time nothing, while I am with him, and when I am called from him, I fall on weeping, because, whatever I do else, but learning, is full of grief, trouble, fear, and whole misliking unto me." I could mention the name of a Connecticut school master, who in 1782 taught a select school. About fifty years afterwards, a pupil in that school made a journey of many miles to see him, and thank him for his counsels and instruction, bestowed upon him when he was only eight or ten years of age.

What a beautiful letter Daniel Webster wrote to his old school master, July 20th, 1852, the last year of his life! "MASTER TAPPAN, I hear, with much pleasure, through the public press, that you continue to enjoy life, with mental faculties bright and vivid, although you have arrived at a very advanced age, and are somewhat infirm. I came to-day, from the very spot in which you taught me; and to me a most delightful spot it is. The river and the hills are as beautiful as ever. But the graves of my father and mother, and brothers and sisters, and early friends, give it to me something of the appearance of a city of the dead. But let us not repine. You have lived long, and my life is already not short; and we have both much to be thankful for. Two or three persons are still living, who, like myself, were brought up, *sub tua ferula*. They remember 'Master Tappan.'

And now, my good old master, receive a renewed tribute of affec-

tionate regard from your grateful pupil ; with his wishes and prayers for your happiness, in all that remains to you of this life, and more especially, for your rich participation, hereafter, in the more durable riches of Righteousness.—Daniel Webster.” Mr. Webster was born January 18, 1782. This letter is a beautiful picture of the feelings entertained by ingenuous children, for good school masters in the last century.

For a long period the only two Books in common use in district schools, were, first, the “*New England Primer*,” which was an equivalent, among the puritans here, for a small prayer book, called the “*Primer*” among the Roman Catholics. This, with its frontispiece of John Rogers in the flames, and his wife and nine children looking on, excited in the mind of the young child while learning its first lesson, the deepest sensibility. There was in it the beautiful cradle hymn of Watts, appealing, as it does, to the highest sentiments of our nature ; and the shorter catechism, to be committed to memory and repeated every Saturday.

The other book was the “*Psalter*,” namely, the book of Psalms printed separately. This also was an equivalent for a certain Roman Catholic book so called.

Arithmetic was taught in these common schools, the teacher only having a book, and writing the sums for the pupils, and showing him how to do them. Sewing was taught by school-dames.

Writing was also taught, the teacher writing the copy and handing it to the pupil with the question, “Can you read your copy ?”

At a later period, “*Dilworth's Spelling Book, or New Guide*,” published 1740, was introduced. He was an Englishman, and died in England, 1781. His book was for a time in common use. Trumbull alludes to it thus, in 1772 :

“ Our master says, (I'm sure he is right,)
There's not a lad in town so bright,
He'll cypher bravely, write and read,
And say his catechism and creed,
And scorn to hesitate or falter,
In *Primer, Spelling Book, or Psalter*.”

His “*School Master's Assistant*,” an arithmetic, was published, after his *Spelling Book* had been well received, in 1743, and was dedicated to “*The Reverend and Worthy School Masters in Great Britain and Ireland*.” School masters in Connecticut used this book in their schools. The sums given out were often cyphered at home in the evening. Classes were also taught by the master in the evening, for which a small stipend was given.

In 1784, *Webster's Spelling Book* began to replace Dilworth's, though with some opposition. "*Dilworth's Ghost*" was written to deter the people of the State from the change. Webster's book was entitled, "*The First Part of the Grammatical Institute of the English Language*." This book, I have heard him say, was introduced into the schools of Connecticut through the influence of the clergymen of Connecticut; though it was highly recommended by others. After this, the "*Second Part*" in the series, was introduced, which was published in 1790. This was a *grammar*. After this, the "*Third Part*" in the series, was introduced. It was a reading book, and was published in 1792. "*Dwight's Geography*," began to be used in the schools of Connecticut, in 1795. It was prepared by Nathaniel Dwight, a brother of Timothy Dwight. Morse's *Geography* was also used, more or less, soon after its publication.

The first clergymen of Connecticut were educated, many of them, at the Universities in England, and had enjoyed intercourse with the learned and polished clergymen of the Episcopal Church there. As we see them now on the canvas, in their wigs, and bands, and gowns, we are impressed with the belief that they were gentlemen. Their manners were grave, dignified and courteous, and they were regarded by the school-masters, and gentlemen, and all of the people as the models of *good manners*. Thus it long continued the case with their successors in office. In the schools in the Colony of Connecticut, it was expected that not only learning, and religion, and morality should be cultivated, but also GOOD MANNERS, in opposition to clownishness on the one hand, and rowdyism on the other. The pupils were expected to bow or courtesy, or, in other words, to make their *manners* when they entered the school, and when they left it; and when they began the recitation, and when they retired. They were taught to address the teacher with the title of "Master." They were taught to show respect to age, and station, and moral worth; to take off their hats when they met respectable persons, as the ministers and principal men were accustomed to do. This regard for *minor morals*, carried out in many particulars, prevailed in Connecticut for something like two hundred years. By thus cultivating the sentiment of politeness in the young, their hearts became better, socially, and good manners became common law.

In some of the acts of the General Court the "GOVERNMENT" of schools is spoken of as if it were as important as instruction. In those days children were expected to be *governed*, not coaxed. This government, in those times, is described as being unreasonably severe.

So it was, judged of by our own standard. But in those times there was, in many places, a high type of discipline in the church, in the family, and in the town. They or their fathers had left England in order that they might have a purer church, and how could they have a purer church without discipline? Parents, in those days, had large families; Dr. Johnson malignantly said of them, that "they multiplied with the fecundity of their own rattlesnakes." Besides, the Pilgrims had left Holland that their children might not be corrupted. Large families require stricter discipline than small ones. In the town, the whipping-post was a standing proof of the importance attached to discipline. The same doctrine prevailed in the schools, as it also did in the English schools. Ministers, too, were full believers in the doctrine, that "the rod and reproof bring wisdom." Accordingly the rod was used, and the ferule, and the block of disgrace, a sort of "stool of repentance," on which the culprit sat, until he was willing to submit to the rules of the school.

But the clergy of Connecticut exerted a MORE DIRECT INFLUENCE in favor of popular or universal education in the State. Having themselves, most of them, been trained, when young, in common schools, a large number of them became teachers in them or in select schools, during their college course or afterwards. Numbers of them, when settled, kept school in their own houses, for the young people of their congregations. Clergymen founded Yale College, and for more than one hundred and fifty years have controlled it, and presided over it. For one hundred and thirty years a large part of the students of the State, educated in it, were fitted for college by clergymen. When I concluded to go to college I applied to Dr. John Elliot to fit me for Yale. He told me that he "felt under the same obligation to lend his aid in fitting young men for college that he did to preach the Gospel."

Clergymen were on the committee for the examination of schoolmasters, and the inspection of schools. They visited the schools, at least at the commencement of the season, and at the close. In this way they became acquainted with the comparative merits of the several schools, and of the several teachers, and of the several pupils. They made the condition and importance of the schools one of their common topics in conversation, alluded to schools often in their sermons, and in their public prayers on the Sabbath, they would say, in respect to them and the college, "cast the salt of Divine Grace into these fountains, that the streams, that annually flow from them, may make glad the city and the church of our God." For a long time

the town was the parish, and the town schools were the parish schools, which the minister felt, officially, bound to foster. And in doing this they were often rewarded, even while living, with the gratitude, the love, and the confidence of three generations. And when such a one died, great lamentation was made over him. And when carried to his grave, he was mourned by the fathers, and the children, and the children's children, as one who had taught them how to think as men, how to act as Christians, and how to behave as gentlemen; as a light-bearer, who had held for them the torch of knowledge, in the meeting-house; in the school-house, and in the dwelling-house; a torch which some of them were ready to seize and hold up in turn in the church, in the school, and in the family. To these ministers, we sons of Connecticut, owe something more than gratitude; we owe them undying affection as our spiritual and educational forefathers.

In the minds of the early clergymen of Connecticut, the church and the school—the *meeting-house* for the one, and the *school-house* for the other—were closely associated. In the early settlement of a town, as soon as the meeting-house was erected, if not sooner, the school-house was built, *near* the meeting-house, the one a symbol of learning, the other of religion. When the minister was settled, the school-master was sure to follow to establish his little seminary, from which the church was to be supplied with intelligent members, and the town with intelligent inhabitants.

With the type of the old Connecticut school-house, which replaced the one constructed of logs, and its slender appointments, many are acquainted, as some such are still standing. There was the large chimney, often on the north end, with its large fire-place, before which the children could warm themselves when they came in, or after shivering on the outer circle of benches. On one side of the chimney was a small entry, and on the other, was a small apartment for the hats, or buff caps, and bonnets, and which served the purpose of a prison, in which were confined disobedient and refractory children. Long benches, without backs, on which the children sat, and thus learned to sustain themselves.

Having been confined in the school from nine o'clock until about eleven, and from one until about three, they, at the notice of the master, hastened to the play-ground fresh from the "constraint that sweetens liberty." Here they contended with each other in feats of agility and strength. They were encouraged to wrestle and to run well, because they might have to wrestle with the Indians in battle,

or to run with them, for escape or for capture. Accordingly some of them emulated the strength of Jacob, who wrestled with the Angel, and some, the fleetness of Asahel, who "was as light of foot as a wild roe."

And when, perchance, some well-known person was passing, the word would come out from some of them, that parson—or squire—or doctor—or deacon—was coming. Immediately they would leave their play for a moment, take off their hats, or caps, and then resume their play. This ready act of civility, they would pay with a conscious sense of politeness,—with a "proud submission," which raised them in their own estimation. They had been taught in the church, in the family, and the school, to respect what is respectable, and to "do their duties to superiors, inferiors and equals."

It should be added that in the settlement of the country towns, before the districts were weakened by being divided, the schools were often large. "The boys came to school in the winter, the only season in which schools were usually open, from distances of several miles, wading through the snow, or running upon the crust, with their curly heads of hair often whitened with frost from their own breath."

VISITATION DAY, in the spring, when the inspectors visited the schools, was a great day in the district. The minister and some of the principal men were present. The school-master was in his glory, now that others had come to magnify his office. Many of the parents were present. The inspectors were interested to behold the "*spem gregis*," the hope of the church and the town. The psalter was read by the older children, and the primer by the younger ones. The writing books and the arithmetic books were handed round. In later times, lessons in spelling from the spelling book were put out. The catechism was recited. The inspectors made their remarks, particularly the minister, upon the proficiency of the school, the manners, the morals, the religion. A prayer was then made by the clergyman in which these several topics were alluded to.

It should be added that a prayer was made by the school-master in a portion of the schools, at nine o'clock, when the school came together in the morning, and at four. In other schools, a prayer was made only at four, when the school was dismissed.

On this subject, listen to the language of President Timothy Dwight: "Of learning and the general diffusion of useful knowledge, the clergy as individuals, have, beyond any other class of men, been the promoters. To this, their own knowledge, the general

nature of their office, and their comparative leisure from the busy occupations of life, almost necessarily lead. In the foundation and the regulation of no small number of our schools, they are directly concerned as principals. To our college they gave birth, continuance, a considerable proportion of its property, and the whole system of its government and instruction. They have supported and educated more scholars of charity, than the whole community besides; nor is there at this time, unless I am deceived, a single school of consideration in the State, in which they have not a principal agency."

Thus the meeting-house was the center of illumination for the town, and the school-house was the center of illumination for the district. The lights in both were steady, irradiating the whole surface of the State, like the lights which on some evenings illumine all the northern sky. This was before the cunning artificers of the press sent up their fireworks to dazzle by their glare and mislead. It was the influence of these steady lights that made Connecticut THE LAND OF STEADY HABITS; a model commonwealth, where, from the cultivation of the arts and sciences, from the general diffusion of knowledge, the people have in the exercise of the right of private judgment, pursued a wise policy in their public acts, and in the administration of their own private and local affairs.

It would exceed my limits to show forth the great results of the educational efforts of the clergy of Connecticut. These would have to be sought not only in the territorial limits of the State, but throughout our broad country, wherever the emigrating sons and daughters of Connecticut have fixed their habitation.

Thus, my dear sir, have I endeavored, briefly to show, that the ministers of the gospel ought to take a prominent part in popular education; from the nature of the Christian religion; from the nature of Protestantism; from the nature of Puritanism; from the nature of their own profession; from the position long occupied by clergymen. In doing this, they ought to be encouraged by the towns, as they were formerly.

How they should do this, I do not presume to say. Each of them has his own gift; each his own circumstances. They have that wisdom in the selection of means, which is profitable to direct.

Very respectfully, your obedient servant,

WILLIAM C. FOWLER.

P. 8.—Your very valuable Report of 1853, when you were Superintendent of Common Schools in Connecticut, renders it unnecessary that I should enlarge my statements on certain topics of interest.



II. THE GRAMMAR SCHOOL.*

BY CHARLES HOOLE, A. M.,

Master of Grammar School in Rotherham in 1636, and of a Private School in London in 1690.

CHAPTER I.—*How to help children that are imperfect in reading English when they are brought to the grammar school, and how to prepare them for more easy entrance upon Latin.*

The want of good teachers of English in most places where grammar schools are erected, causeth that many children are brought thither to learn the Latin tongue before they can read well; and this chiefly, to prevent their loss of time with those that can teach them no further.

Now such scholars for the most part become the greatest disgrace to the master of all the rest, partly because indiscreet and illiterate parents, (I will not say servants,) that can scarcely read English themselves, become too severe judges of his work, and partly because he seems to some to undervalue himself by admitting petties into his school. But for the toil and trouble that he hath in teaching such, I rather seek how to remedy it, than go about in words to express it.

To help therefore that defect of reading English aright, you may take this as the most useful course:—

1. Let them read a chapter every morning and every noon in the *New Testament*, and at ten and four o'clock, a piece of the *Accidents*, which will require (at least) a quarter of a year to be read over, in case the children be very imperfect; but in case they be any whit ready, it may be gone over in six weeks' time.

2. To exercise their slender memories at their first coming to school, and to find them some little task, (to which they should be inured at the first, that they may not take it more hardly afterward,) let them commit to memory some few staves of such psalms in meter as you in your discretion shall think best to suit with their shallow apprehensions. Psalms i, iv., xii., xv., xix., xxv., xxxiv., lxvii., c, ciii., civ., cxix., are excellent for this purpose.

* The following is a copy of the original title page:—

THE
USHER'S DUTY,
OR
A PLAT-FORME
of Teaching
LILLIES Grammar.
By C. H.
LONDON,

Printed by F. T. for Andrew Cressk.
at the Green Dragon in Pauls
Church Yard, 1650.

That they may be more perfect in their lessons before they come to say them,

1. It were good if you did now and then read a piece for their imitation, observing the just and full pronunciation of each syllable, and making pauses as they come.

2. But especially as they sit in their form, see that every one after another read the lesson twice or thrice over, (the highest, because the most able, beginning to read first,) and cause that every one attend to what is read, looking constantly upon his book, and let them have liberty (who can soonest) to correct him that readeth any word amiss, and to note it as his mistake. But in this a care must be had that they make no noise nor disturbance to the rest of the school.

3. When they come to say it, let every one in that order you shall appoint (beginning either with the highest or lowest, or otherwise) read the whole lesson, or a piece of it, as the time will best permit you to hear them, and when the lesson is gone over often enough, you may propound a familiar and short question or two out of it thereby to make somewhat of its meaning stick in their memories, and dismiss them to their places to ask one another the like.

But because the *Accidents*, as it is now printed, (especially that part of it which concerneth the conjugating of verbs,) is too full of difficult abbreviations for most children to read, or some masters (that undertake it) to teach, I have found a great advantage and ease by making use of the examination of the *Accidents* before I put them to read the *Accidents* itself, especially with some more dull-witted boys that I could not otherwise fasten upon, and the way I used it was this: I caused

1. That children should read over only the first part of it, which concerneth the introduction of the eight parts of speech, by taking so much at a time as they could well be able to read and belonged to one or more particular heads of grammar. Thus in the first going it over, I made them acquainted with the usual terms of grammar art, so as to be able (at least) to turn to a noun, pronoun, verb, &c., and to what belongs to them, as the numbers, cases, persons, moods, &c., and to tell how many there are of each.

And in the second reading it over, I taught them to take notice what every part of speech is, and how it differs from others, and what things belong to every one of them. And this I did by English examples, which best help to instruct their understandings in the meaning of what they read, and confirm their memories to keep it. Ex. gr., having showed them in their book, that a noun is the name of a thing, and that it is substantive or adjective, and hath numbers, cases, genders, declensions, and degrees of comparison, I instance several words, as a *horse*, of *men*, *sweet honey*, with *sweeter words*, and let the children who can readiest tell me what belongs to them. This is (as Mr. Woodward very well expresseth it in his *Light to Grammar*, chapter 2) "To teach a child to carry a torch or lantern in his hand, that thereby the understanding may do its office and put to memory to do hers; to slip into a child's understanding before he be aware, so as he shall have done his task before he shall suspect that any was imposed; he shall do his work playing, and play working; he shall seem idle and think he is in sport, when he is indeed seriously and well employed. This is done (saith he) by precognition, for it conveys a light into the understanding which the child hath lighted at his own candle."

Now forasmuch as the way of working hereby is, when the inward senses of the child are instructed by the outward, and the more help one hath of the outward, the surer and firmer the instruction is within, I can not but here give notice of Mr. Comenius' *Orbis Pictus* as a most rare device for teaching a child at once to know things and words by pictures, which may also serve for the more perfect and pleasant reading of the English and Latin tongues, and entering a child upon his *Accidents*, if the dearneſs of the book (by reason of the brass cuts in it) did not make it too hard to come by.

But where the book may be readily had, (as who would not bestow four or five shillings more than ordinary to profit and please a son?) I would advise that a child should bring it with him at his first coming to a grammar school, and be employed in it, together with his *Accidents*, till he can write a good legible hand, and then a master may adventure to ground him well in orthography and etymology, by using that book according to the directions already given in the preface before it, and causing him every day to write a chapter of it in English and Latin.

He that would be further instructed how, by teaching English more grammatically, to prepare his scholars for Latin, let him consult Mr. Poole's *English Accidents* and Mr. Wharton's *English Grammar*, as the best books that I know of at present for that purpose.

II.—*How to teach children in the first form the grounds or rudiments of grammar contained in the Accidents, and to prepare them for the Latin tongue with ease and delight.*

Being here to deliver my mind concerning entering little ones, by way of grammar, to the Latin tongue, (a matter which I may truly say hath, ever since I began to teach, cost me more study and observation than any one point of my profession, and the more, because I see few able schoolmasters vouchsafe so far to unman themselves as to mind it,) I desire three things may be considered by all that go about to enter children to grammar learning, viz., that

1. There is a great difference betwixt a man that teacheth, and a child that is to be taught; for though I do not altogether hold with him that sayeth a man in his childhood is no better than a brute beast, and useth no power but anger and concupiscence, nor take upon me here to dispute whether a child learneth more by rote than by reason, yet this I dare aver, that the more condescension is made to a child's capacity, by proceeding orderly and plainly from what he knoweth already to what doth naturally and necessarily follow thereupon, the more easily he will learn. A man therefore that hath the strength and full use of reason, must conduct his young learner to follow him in a rational way, though he must not expect him to go, *æquis passibus*, as fast as himself. And forasmuch as a child is tender, a man must abate of his roughness; seeing a child is slow of apprehension, he must not be too quick in his delivery; and seeing a child is naturally awkward to his work, he must not be too passionate if he do amiss. Tully's observation is, that *Quo quis doctior est, eo iracundius docet*; and Mr. Mulcaster gives notice that there is a number of discoursers that can say pretty well to a general position, but show themselves altogether lame in the particular applying of it, which is a thing that attendeth only upon experience and years. He would therefore (and that rightly) have a trainer of youth reclaimed unto discretion, whose recommendation Arie-

tole placeth in the skill of specialties. And I would advise him that hath to deal with a child, to imitate the nurse in helping him how to go forward, or the gardener in furthering the growth of his young plant. *Est et hac summi ingentis maxima infirmitas non posse descendere*—Tall wits, like long backs, can not abide to stoop—saith a teacher of eloquence; but whosoever is a schoolmaster, and would do his duty as he ought, must account it a point of wisdom to condescend to a child's capacity, be it never so mean. How have I delighted to see an artist (I mean a watchmaker or the like) spend an hour or two sometimes in finding a defect in a piece of work, which he hath afterward remedied in the turning of a hand; whereas, a more hasty workman hath been ready to throw the thing aside, and to neglect it as good for no use. Let the master ever mind where a child sticks, and remove the impediments out of his way, and his scholar will take pleasure that he can go on in learning.

2. There is a great disproportion betwixt a child's capacity and the *Accidents* itself. Children are led most by sense, and the grammar rules, consisting in general doctrines, are too subtle for them. Children's wits are weak, active and lively, whereas, grammar notions are abstractive, dull and lifeless; boys find no sap nor sweetness in them, because they know not what they mean, and tell them the meaning of the same rule never so often over, their memories are so waterish, that the impression (if any were made in the brain) is quickly gone out again. He runneth on apace and mindeth nothing so much as play; and it is very hard to teach a child in doing a thing to heed, much less to judge, what he doth, till he feel some use of reason; in the meantime, he will profit more by continual practice and being kept still (as he loves to be) doing, than by knowing why and being called upon to consider the causes wherefore he doth this or that.

Besides, it will clearly appear to any that shall but mind the confused order (especially of the verbs) and the perplexity of some rules and examples, that that book was rather made to inform those of riper years, who knew something of Latin before, of the reasons of what they knew, than to direct little ones (as we now do) to use it as a rule about that whereof they are ignorant altogether.

3. It is one thing to learn the Latin tongue, or any other language, and another to learn the grammar as a guide to it, or a means to attain the reason of it. We see how readily children learn to speak true and proper English, (and they may also do the same in Latin,) by daily use and imitation of others, long before they are able to apprehend a definition of what grammar is, or any thing else concerning it; and the reason is, because the first is a work of the imagination and memory, which are apt to take and keep impressions, having the senses to help them, but the other belongs to the understanding, which for want of the strength of reason to assist it, is hard to be wrought upon in a child, and till the memory and understanding go hand in hand, a child learns nothing to any purpose. Hence, it cometh to pass, that grammar learning (as it is now generally used) becometh a work of more difficulty and discouragement, both to master and scholar, than any study or employment they undertake, and that many have striven to contrive more facile grammars for their scholars; whereas, indeed, the right and constant use of any one that is complete, so as to handle the *subjectum totale* of the art, doth easily reduce all others to itself, especially after the language is somewhat gained.

These things thus premised, I conceive it very necessary for all such as un-

dertake to teach grammar to little children, to cherish and exercise those endowments which they see do show themselves most vigorous and prompt in them, be they memory, fancy, &c., and to proceed orderly and by degrees, (for so nature itself doth,) that they may be able to hold pace with their teachers, and to perceive how they themselves mount higher and higher, and at every ascent to know where they are, and how to adventure boldly to go forward of themselves. And forasmuch as the *Accidents* is generally made use of as an introduction to Latin grammar, (which of itself is but a bare rule, and a very naked thing, as Mr Mulcaster hath well observed,) and it is one thing to speak like a grammarian, and another thing to speak like a Latinist, (as Quintilian hath noted,) it is fit that both the *Accidents* and the Latin tongue together should be brought within children's reach, and made more familiar unto them than formerly. And how this may be done even with those of seven years of age, or under, I shall now go on to discover according to what I have tried, and do still every day put in practice. But this I require aforehand, (which Mr. Mulcaster also wished for,) that a child may have his reading perfect and ready in both the English and Latin tongues, and that he can write a fair hand before ever he dream of his grammar; for these will make him so that he shall never complain of after difficulties, but cheerfully make a wonderful riddance in the rest of his learning.

The commonly received way to teach children the first rudiments of Latin speech is, to put them to read the *Accidents* once or twice over, and then to let them get it without the book by several parts, not respecting at all whether they understand it or not. Thus they spend two or three years (for the most part) in a wearisome toil to no purpose, not knowing all the while what use they are to make of their book, nor what the learning of such a multitude of rules may tend to; and in the interim of getting the *Accidents* by heart, (if great care be not taken,) they lose that ability of reading English which they brought from the Petty School, and this makes the parents cry out against learning Latin, and complain of their children not profiting at the grammar schools, whence they are therefore sometimes taken and sent back again to a mistress or dame to learn English better. The conscientious master all the while striving to the uttermost of his strength and skill to preserve his credit, and not knowing well how to remedy this mischief otherwise than by hastening on the children in this common road, doth overtoil (if not destroy) himself, and discourage (if not drive away) his scholars by his too much diligence.

Having, therefore, made sure that the little scholars can read very well and write plainly beforehand, put so many of them as are well able to hold pace together into one form, and begin to teach them their *Accidents* in an understanding manner thus:

1. Give them a glimpse or insight into the introduction or first part of it, by dividing it into twelve parts, and making them to take notice of the chief heads in every one; whereof the first may be, concerning the eight parts of speech, of a noun and its kinds—numbers, cases and genders.

The second, of the declensions of nouns' substantives.

The third, of the declining of adjectives and their comparison.

The fourth, of a pronoun.

The fifth, of a verb and its kinds—moods, gerunds, supines, tenses, persons and conjugations.

The sixth, of the conjugating of verbs in *O*.

The seventh, of the verb *sum*.

The eighth, of verbs in *OR*.

The ninth, of verbs irregular, as *possum*, &c.

The tenth, of a participle.

The eleventh, of an adverb.

The twelfth, of a conjunction, a preposition, and an interjection.

By this means they shall know the general terms of grammar, and where to turn to any part of speech and what belongs to it in the book. As they get their parts, make them hear one another read it over in their seats as they sit orderly; as they say it, let every one read a greater or lesser share as you please to appoint, and make the rest attend to him that readeth; after they have said it, one may take the examination of the *Accidents*, and out of it ask the questions belonging to their present part, to which the others may make answer out of the words of their *Accidents*, which if they can not readily do, so, he may tell them out of his book; and if you yourself sometimes examine them in the most familiar and general questions, it will help them to understand it, and sharpen their memories very much for the getting of that by heart whereof they already know somewhat.

2. When they get the introduction, *memoriter*, let them take but a very little at once, that they may get it more perfectly in a little time, and this will be a means still to hearten them on to a new lesson, but be sure that every lesson end at a full period; and that none may seem to be overcharged or hindered, let always the weakest child appoint the task, and cause the stronger to help him to perform it as he ought.

Forasmuch as your scholars' memories are yet very weak and slippery, it is not amiss to help them by more frequent repetitions, especially at the end of every part of speech, which they should examine so often over till they can answer to any thing that is in their book concerning it; then let them proceed to the next in like manner, not forgetting to recall the more general and necessary points to memory from the very beginning, and this will be a means to make them keep all fresh in mind, and to be able to tell you what part of speech any word is which you shall name, either in English or Latin, and what belongs to it, which is one main end for which the introduction was made. You may now and then exercise them in distinguishing the eight parts of speech, by giving them a period, and after they have written it out, making them to mark every word what part of speech it is by these figures, 1, 2, 3, 4, 5, 6, 7, 8.

3. But as they get the introduction by heart, and learn to answer to the questions raised out of it, an especial care and pains must be taken, ever and anon, to make them very perfect in declining nouns and forming verbs. Let them, therefore, as it were by by-tasks, get the examples of the nouns and verbs very perfectly which are set down in their *Accidents*.

Then, first, let them decline the articles severally or jointly, for by these they may know the gender, case and number of a noun, though many learned grammarians of late do leave them off as useless. *Harum musarum* was formerly, as much as to say that *musarum* is of the feminine gender, genitive case and plural number. And whereas, the rule beginneth with the genitive case, do you supply the nominative thus:

2. Cause them with every example to join the rule of the declension, and

thereby to know the due termination of every case in both numbers, saying the English sometimes before and sometimes after the Latin; the nominative case singular of the first declension endeth in *a*, as *nominativo hac musa*, a song; the genitive in *æ*, as *hujus musæ*, of a song; the dative in *æ*, as *huic musæ*, to a song, &c.

Let them give the bare terminations of every declension in each case in both numbers, as to say, the terminations of the first declension throughout all cases in both numbers are, singulariter nom., *a*; gen., *æ*; dat., *æ*; accu., *am*, &c.

The terminations of the nominative case singular of the five declensions are, of the first, *a*; of the second, *r*, *us*, *um*; of the third, *a*, *e*, *i*, *l*, *n*, *o*, *r*, *s*, *i*, *x*; of the fourth, *us*; of the fifth, *es*.

The terminations of the genitive case singular of the five declensions are, of the first, *æ*; the second, *i*; the third, *is*; the fourth, *us*; the fifth, *ei*, &c. And let them take especial notice of the endings of the genitive case singular, because thereby they may know of what declension a noun is when they find it in a vocabulary or dictionary.

Furnish them out of their vocabulary, or otherwise, with a store of examples for every several declension till they can readily decline any regular noun; but then especially mind them of the vocative singular of those nouns that end in *us* of the second declension, and of those that are of the neuter gender, of the second, third, or fourth declension, and what cases they make all alike in both numbers.

5. Exercise them in declining nouns so often till they can tell you at once the termination of any case in either number, in one or all of the declensions, and say on a sudden what any noun you name to them doth make in any one case of each number, in English or Latin. As, if you ask them of what declension, case and number this termination *os* is, they can presently answer, that *os* is of the second declension, accusative case and plural number; or, if you ask them of what declension, case and number *virtute* is, they can answer, that *virtute* is of the third declension, the ablative case and singular number. So in English, if you should say, *with a pen*, they can tell you it is the ablative case and singular number, and therefore must be said in Latin, *penna*. Or, if in Latin you should say, *pennas*, they can tell you it is of the accusative case, plural number, and must be said in English, *pens*, or *the pens*.

6. In declining adjectives, cause them to mind to what declension their several genders belong, and after they can parse every gender alone by itself, teach them to join it to a substantive of the same or a different declension, with the English either before or after the Latin, thus: Singulariter nominativo, *pura charta*, fair paper; gen., *pura chartæ*, of fair paper, &c. Sing. nom., *novus liber*, a new book; gen., *novi libri*, of a new book, &c. Sing. nom., *dulcis conjux*, a sweet wife; gen., *dulcis conjugis*, of a sweet wife, &c. *Edentula anus*, a toothless old woman; gen., *edentulæ anus*, of a toothless old woman, &c. *Frigida glacies*, cold ice; gen., *frigida glaciæ*, of cold ice, &c. *Gravis turbis*, a troublesome rout; gen., *gravis turbæ*, of a troublesome rout, &c. *Magnum onus*, a great burthen; gen., *magni oneris*, of a great burthen, &c.

7. Acquaint them well with the manner of forming the three degrees of comparison, by showing them how the comparative and superlative are made of the positive, according to the rules, and then let them decline an adjective in all the degrees together, throughout all cases and genders in both numbers, as

well in English as in Latin, thus: Sing. nom., *durus*, hard, *durior*, harder, *durissimus*, very hard; *dura*, hard, *durior*, harder, *durissima*, very hard; *durum*, hard, *durius*, harder, *durissimum*, very hard. Gen., *duri*, of hard, *durioris*, of harder, *durissimi*, of very hard, &c. Sing. nom., *felix*, happy, *felicior*, more happy, *felicissimus*, most happy; *felix*, happy, *felicior*, more happy, *felicissima*, most happy; *felix*, happy, *felicus*, more happy, *felicissimum*, most happy. Gen., *felicis*, of happy, *felicioris*, of more happy, *felicissimi*, of most happy, &c. Then teach them to join a substantive with any one or all of the degrees, thus: *Injustus pater*, a harsh father; *injusta mater*, an unjust mother; *injustum animal*, an unjust creature. *Indoctus puer*, an unlearned boy; *indoctior puella*, a more unlearned girl; *indoctissimum vulgas*, the most unlearned common people.

8. To help them the better to perform this profitable exercise of themselves, let them sometimes write a noun, which you appoint them at large, and distinguish betwixt that part which is movable and that which is immovable; I mean betwixt the forepart of the word and its termination, thus: Sing. nom., *mens-a*, a table; gen., *men-a*, to a table; dat., *mens-a*, to a table, &c., to the end.

Thus, likewise, they may be exercised in writing out substantives and adjectives, and forming the degrees of comparison, with which work they will be exceedingly much delighted when once they can write, and by once writing, they will better discern what they do than by ten times telling it over; which makes me again press hard, that either a child may be able to write before he be put to the grammar school, or else be put to learn to write so soon as he comes thither. For besides the confused disorder it will make in a school when some children are fitted to undergo their tasks and others are not, they that can write shall be sure to profit in grammar learning, whereas, they that can not will do little but disturb the school and hinder their fellows, and bring a shame upon their master, and a blame upon themselves because they do not learn faster. And, also, poor child, how should he be made to go that wants his legs? if he go upon crutches it is but lamely. And how should he be taught grammar, which is the art of right writing as well as speaking, that can not write at all? I wish they that take upon themselves to teach boys grammar before they can write, would but take upon themselves the trouble to teach one to speak well that can not speak at all. But I say no more of this subject, for though what I say have seemed to some a mere paradox, yet upon trial they have found it a plain, real truth, and such as any man will assent to.

As for that which is generally objected, that whilst children are young their hands are unsteady, and therefore they should go on at their books till they grow more firm, it will quickly be found a mere idle fancy when such objectors shall see less children than their own every day practice fair writing, and make more speedy progress at their books by so doing.

Now touching verbs:

1. Be sure that children be well acquainted with the different kinds of them, distinguished both by signification and termination, as also with their moods, tenses and signs, and with the characteristic letters of the four conjugations, (which are *a* long, and *e* long, and *e* short, and *i* long.) And as they conjugate a verb, let them take more particular notice of its present tense, preterperfect tense and first supine, because of these all other tenses are formed; and these, therefore, are specified in every dictionary.

2. Let them first repeat over the verb *sum*, according to four moods only, (the optative, potential and subjunctive being the same in all verbs,) because it hath a proper manner of declining, and is most frequently used, and will be helpful to form the preter tenses in the passive voice, which consist of a participle joined with it.

3. Let them get the active voice very perfectly by heart, and afterward the passive, (though they do it more leisurely, taking but one mood at a lesson,) and let them now repeat the paradigms as they stand confusedly together in their book, but sever them one from another, and go on with one at once, viz., *amo* by itself, *doceo* by itself, *lego* by itself, and *audio* by itself, through all moods, tenses, numbers and persons, giving the English with the Latin, sometimes putting the one before and sometimes the other; and be sure to make them mind all the figures in English, and the terminations answering to them in Latin.

4. Then teach them to form only the first person singular of every conjugation severally, both with Latin before English and English before Latin, as *amo*, I love, *amabam*, I did love, &c.; or I love, *amo*, I did love, *amabam*, &c.

5. Cause them again to form only the present tense, with the tenses that depend more immediately upon it, and then the preter tense, with those that are formed of it. And give them here to observe the rule in their *Accidens* touching the formation of the tenses, which is more easy to be delivered and remembered, thus: All tenses that end in *ram*, *rim*, *ssem*, *ro*, *sse*, are formed of the preter tense, and all the rest of the present tense, according to the Latin verse:

Ram, rim, ssem, ro, sse; formabit cætera præsens.

6. Make them give you the terminations of the first person singular, throughout all moods and tenses, of each several conjugation, as to say, the terminations of the first persons singular in the first conjugation are *o*, *abam*, *avi*, *averam*, *abo*, &c. Then let them run over the terminations of all the persons in both numbers of every mood and tense in the several conjugations, as to say, the terminations of the indicative mood, present tense, of the first conjugation are, *o*, *as*, *at*, *amus*, *atis*, *ant*; of the preterimperfect tense, *abam*, *abas*, *abat*, &c.

7. Let them join the terminations of the first person with the signs of every tense in both voices, thus: *o*, do; *bam*, did; *i*, have; *ram*, had; *bo*, shall or will, &c.; *or*, am; *bar*, was; *us sum vel fui*, have been; *us eram vel fueram*, had been; *bor*, shall be, &c., throughout all the conjugations. And let them withal take notice how the three persons in both numbers differ both in signification and ending, as I, *o* and *r*; thou, *s* and *ris*; he, *t* and *tur*; we, *mus* and *mur*; ye, *tis* and *ni*; they, *nt* or *ntur*.

8. Let them repeat the active and the passive voice together, and compare them one with another as they form them in all persons throughout each mood and tense of every conjugation, thus: *amo*, I love; *amor*, I am loved; *amabam*, I did love; *amabar*, I was loved, &c.

9. Exercise them well in so many several examples of the four conjugations, as that on a sudden they can render you any verb out of Latin into English, or out of English into Latin, with its right mood, tense, number and person, you telling them the first word of it, or they knowing it beforehand, as if you say, *we have run*, they can answer, *cucurrimus*; or if you say, *I shall blot*, they can answer, *maculabo*, having learned that *curro* is Latin for *to run*, and that *maculo* signifieth *to blot*. To make them more fully acquainted with the variation of a verb, it were good sometimes for them to write out at full length, both in

English and Latin, making a line betwixt the alterable part of it, and the termination, (which remaineth alike to all,) thus: *voc-o*, I call; *voc-as*, thou callest; *voc-at*, he calleth, &c.

N. B.—The nouns and verbs being thus perfectly gotten at the first, (till which be done, the preface before the grammar counteth not the scholar ready to go any further, and saith it may be done with a quarter of a year's diligence, or very little more,) the difficulty of the Latin tongue will be quite overpast, and a child will more surely and heedfully learn them thus singly by themselves than by long practice in parsing and making Latin, because then he is to attend to many other things together with them, for the better observation whereof these will abundantly prepare him.

And because all children are not so quick-witted as fully to apprehend the various alteration of the nouns and verbs till after long and continued practice, it were good if a time were set apart, once a week, wherein all the scholars (especially of the three lower forms, and those in the upper that are less expert, as having perhaps come from a school wherein they were never thus exercised) may be constantly employed in this most profitable exercise. And for more ready dispatch amongst a multitude, it is not amiss if they repeat them through in a round, word by word, saying every one in order after another, thus: 1. Sing. nom., *musa*, a song; 2. Gen., *musæ*, of a song; 3. Dat., *musæ*, to a song; 4. Accus., *musam*, the song, &c., till they have gone through all the declensions and conjugations, and the forementioned variety of practice upon them, according as we may observe Corderius in his *Colloquies* to have given us a hint. And to stir them all up to more attentiveness, the master may (unexpectedly sometimes) ask the case of a noun, or the mood and tense of a verb, of one that he espieth more negligent in minding than the rest.

As a help to the better performance of this necessary task, I provided a little book of one sheet, containing the terminations and examples of the declensions and conjugations, which the less experienced may make use of till they can exercise themselves without it; by the frequent impression and ready sale whereof, I guess it hath not been unacceptable to those of my profession for the purpose whereto I intended it; and I have sometimes in one afternoon made a thorough practice of all that hath here been mentioned touching nouns and verbs, without any wearisomeness at all to myself, or irksomeness to my scholars, who are generally impatient of any long work, if it be not full of variety, and easy to be performed.

Some little pains would also be taken with the pronouns, so as to show their number, distinction, manner of declining both in English and Latin, and their persons; and then with the participles to mind how their four tenses are distinguished both by their signification and ending, and how they are declined like adjectives.

Touching adverbs, conjugations, and interjections, they need only to tell of what signification they are; and touching prepositions, let them observe which serve to an accusative case, which to an ablative, and which to both.

Now for the more orderly dispatch of this first part of the *Accidents* and the better learning of every part of it, not by rote, but by reason, and to make children more cunning in the understanding of the things than in rehearsing of the words, and to fasten it well in their memories, I have found it very profitable to set apart two afternoons in a week (commonly Tuesdays and Thurs-

days) for the examination of it all quite through, causing one side of a form to ask the questions out of the examination of the *Accidents*, and the other to answer according to the words of their book; and whether they do this exactly, *memoriter*, or sometimes looking upon the book, it makes no matter, for the often practice thereof will be sure to fix it after a little while in their understanding and memories so fast, that they will have it ready for use against they come to the second part of the *Accidents*, which concerneth concordance and construction.

N. B.—When children first begin their introduction, they may provide a little vocabulary, (if the *Orbis Pictus* be too dear,) out of which they should be made to read a chapter every day, at one or four o'clock, and when it is read over you may see who can give you the most names of things under one head, both English and Latin, and let him that tells you the most have some little reward for encouragement, to draw on others in hope of the like to do as well as he. This profitable exercise was often used by Corderius, and is an excellent mean to help children to store words, which are indeed the subject about which grammar is conversant, so that to teach one grammar without giving him some knowledge of words, is to teach him to tie a knot that hath not a string to tie it upon. They may say the introduction for parts, and the vocabulary for lessons, (as you please,) and whenever they go out about necessitous business, be sure they say (at least) four words of those which they have learned, and let them always carry their vocabulary about with them to be looking into it for words.

Thus, then, I allow one-half year for boys in the lowest form, that can read and write beforehand, to learn the first part of the *Accidents*, and how to call things by their Latin names, making use of a vocabulary.

And then I would have them divide the whole introduction into twelve parts, (as they did at the first reading of it over,) and repeat constantly every morning one by heart to fix it well in the memory; and for forenoon lessons (to be said about ten o'clock) they may proceed to the second part of the *Accidents*, commonly called the English rules, for the perfect knowledge and exercise whereof, they may profitably spend the succeeding half year.

In getting whereof, because custom hath everywhere carried it (contrary to those excellent directions given in the preface to the reader, of which Mr. Hayne mentioneth Cardinal Wolsey to have been the author) for children first to read them over, and afterward to con them by heart as they stand in the book, (making it a work merely for the memory, which some children are good at, though they understand nothing at all, and therefore many unskillful masters, not knowing how to do otherwise, especially with boys that cannot write, let them run on by rote, presuming that when they have got the rules thus, they may be afterward made to understand them by practice in parsing,) I will go along with the stream, and allow my scholars to get them by heart, saying two or three rules at a time, as they do in most schools; and as they do this, I would have them chiefly to take notice of the titles, or heads, and which are the general rules, and which are the observations and exceptions made concerning it, that by this means they may learn to turn readily to any one of them that shall be called for. But that children may best understand and soonest conceive the reason of the rules, and thereby be made acquainted with the fashion of the Latin tongue, (which is the main scope that this part of the

Accidents aimeth at,) I would have them daily exercised in the practice of concordance and construction (which will also confirm and ready them in the introduction) after this manner:

1. Let them mark out the more general and necessary rules (as they go along) with their examples, and after they have got them perfectly by heart, let them construe and parse the words in the example, and apply the rule to the words to which it belongeth, and wherein its force lieth.

2. Let them have so many other examples besides those that are in their book as may clearly illustrate and evidence the meaning of the rule, and let them make it wholly their own by practicing upon it, either in imitating their present examples, or propounding others as plain. Thus, that example to the rule of the first concord may be first imitated: *Præceptor legiti, vos vero negligitis*. The master readeth, and ye regard not. The pastors preach, and people regard not. I speak, and ye hear not. We have read, and thou mindest not. And the like may be propounded, as—Whilst the cat sleepeth the mice dance. When the master is away the boys will play. Thou neglectest when I write. And these the children should make out of English into Latin, unto which you should still add more till they be able by themselves to practice according to the rule.

3. After they have thus gone over the general rules, let them together with one rule get its exceptions and observations as they lie in order, and learn how they differ from the rule, and be sure that they construe and parse every example, and imitate and make another agreeable to the rule, observation or exception, as is shown before.

N. B.—Now forasmuch as little ones are too apt to forget anything that hath been told them concerning the meaning of a rule and the like, and some indeed are of more leisurely apprehensions than others, that require a little consideration of a thing before they can conceive it rightly, they may be helped by making use of the second part of the *Accidents* examined, wherein,

1. The rules are delivered by easy and short questions and answers, and all the examples are Englished, and the words wherein the force of the example lieth are applied to the rule.

2. The examples are grammatically construed, and all the first words in them set down in the margin, and referred to an index, which sheweth what part of speech they are, and how to be declined or conjugated. This I contrived at the first as a means to prevent children's gadding out of their places, under a pretense of asking abler boys to help them in construing and parsing these examples, but upon trial I found it a great ease to myself for telling the same things often over, and a notable encouragement to my scholars to go about their lessons, who always go merrier about their task when they know how to resolve themselves in anything they doubt.

3. When they have got the second part of the *Accidents* well by heart, and understand it (at least) so far as to be able to give you any rule you call for, you may divide it also into eight parts, according to the heads set down in the book, whereof the

First may be concerning the first, second and third concord.

The second, concerning the case of the relative, and the construction of substantives.

The third, concerning the construction of adjectives, and of a pronoun.

The fourth, concerning the construction of verbs with a nominative and genitive case.

The fifth, concerning the construction of verbs with a dative, accusative and ablative case.

The sixth, concerning the construction of passives, gerunds and supines.

The seventh, concerning time, space, place and impersonals.

The eighth, concerning the participle, the adverb, the conjunction, the preposition, and the interjection, which being added to the foregoing twelve, the whole *Accidents* may be easily passed over at twenty parts, and kept surely in mind by repeating it once a month for morning parts, and examining it every Tuesday and Thursday in the afternoon.

As they made use of the *Vocabulary*, together with the first part of the *Accidents*, so may they join *Sententias Puerilis* with the second, which book I would have them to provide both in English and Latin.

1. Because it renders the book more grateful to children, who by reading their lessons in their mother's tongue know better what to make of them.

2. Because they are apt to mistake what they have been construed, especially in words that have various significations.

3. Their memories being short, they must be told the same word as oft as they ask it ere they come to say it, and when they come (perhaps) they can not construe one sentence to any purpose.

As they learn this book, let them but take three or four lines at once, which they should,

1. Construe out of Latin into English, and then out of English into Latin.

2. Decline the nouns and form the verbs in it throughout, and give the rules for the concordance and construction of the words.

3. Bring their lessons fairly written out both in English and Latin, in a little paper book, which will exceedingly further them in spelling and writing truly.

4. To fix their lessons the better in their memory, you may ask them such plain questions as they can easily answer by the words in the sentence.

5. Let them also imitate a sentence sometimes by changing some of the words, and sometimes altering their *Accidents*.

6. Give them sometimes the English of a sentence to make into Latin for themselves, and then let them compare it with the Latin in the book, and see wherein they come short of it, or in what rule they fail.

For though the main end of this book, which is full of plain lessons both of honesty and godliness, be to instill those grave sayings into children's minds, (some of which notwithstanding are too much beyond their reach) and it be not perhaps so useful for the speedy gaining of Latin, yet by being thus made use of, it may be very much improved to both purposes.

Here I think it no digression to tell, how I and some school-fellows (yet living, and eminent in their scholar-like professions) were nestled two or three years together in learning this book of sentences. After we had gone over our *Accidents* several times by heart, and had learned part of *Propria quæ maribus*, we were put into this book, and there made to construe and parse two or three sentences at once out of mere Latin, and if in anything we missed, we were sure to be whipped. It was well if, of sixteen or twenty boys, two at any time could say it, and that they did say it right was more by hap-hazard than any thing that they knew; for we knew not how to apply one rule of grammar to

any word, nor could we tell what part of speech it was, or what belonged to it, but if the master told us it was a noun, to be sure we said it was of the nominative case and singular number; and if a verb, we presently guessed it to be of the indicative mood, present tense, singular number, and third person, because those coming so frequently, we erred the less in them. And an ignorant presumption that we could easily say them, made us spend our time in idle chat, or worse employment; and we thought it in vain for us to labor about getting a lesson, because we had no help at all provided to further us in so doing. Yet here and there a sentence, that I better understood than the rest, and with which I was more affected, took such impression as that I still remember it, as *Gallus in suo stirquilinio plurimum potest. Ubi dolor, ibi digitus, &c.*

This I have related, by the by, to manifest by mine own sense and experience what severity children for the most part undergo, and what loss of time befalls them in their best age for learning, when they are merely driven on in the common road, and are not (rather) guided by a dexterous, diligent and discreet teacher, to understand what they learn in any book they are put into.

Now because all our teaching is but mere trifling, unless withal we be careful to instruct children in the grounds of true religion, let them be sure to get the Lord's Prayer, the Creed, and the Ten Commandments, first in English, and then in Latin, every Saturday morning for lessons, from their first entrance to the grammar school; and for their better understanding of these fundamentals of Christianity, you may (according to Mr. Bernard's little catechism) resolve them into such easy questions, as they may be able to answer of themselves, and give them the quotations, or texts of Scripture, which confirm or explain the doctrinal points contained in them, to write out the following Lord's day, and to show on Monday mornings when they come to school. In short, then, I would have this lowest form employed one-quarter or half a year in getting the *Introduction* for parts and lessons, and as long in repeating the *Introduction* at morning parts, and reading the *Vocabulary* for afternoon parts, saying the English rules for forenoon lessons, the *little Vocabulary* for afternoon parts, and *Sententia Pueriles* for afternoon lessons, and the *Principles of Christianity* for Saturday lessons. So that in one year's time this work may be fully complete, of preparing them for the Latin tongue, by teaching them the perfect use of the *Accidents*, and helping them to words, and how to vary them.

III.—*How to make children of the second form perfect in the rules of the genders of nouns, and of the preterperfect tenses, and supines of verbs, contained in Propria quæ maribus, Quæ genus, and As in Præsentî; and how to enter them in writing, and speaking familiar and congruous Latin.*

The general course taken in teaching the rules of the genders and nouns, and conjugating verbs, is, to make children to patter them over by heart, and sometimes also to construe and parse them; but seldom or never are they taught the meaning of a rule, or how to apply it readily to the words they meet with elsewhere.

The volubility of the verse doth indeed help some quicker wits for the more ready repeating of them; but others of more slow pace (that learn better by understanding what they say) are apt to miscall every word in their lesson, because they can not tell what it meaneth; and let them take never so much pains about it, very little of what they are to learn will stick in their memories.

Some therefore have decried this patching of rules into a cobbling verse; others have thought it better to denote the genders of nouns, and the preterperfect tenses of verbs by the terminations of the first words, and some have quite altered these rules by expunging some words and inserting others, which they thought might better agree with them; but for my part, I like his judgment well, that said it was impossible for any grammarian to make better rules than these in *Propria quæ maribus*, and *As in Præsenti*; for though in some things they may be faulty, as *Quæ genus* is in very many, yet (as Mr. Brinsley saith of the *Accidents*) a wise master is not to stand with his children about mending of it, but only to make them understand the rules, as they are set down in the book, which that they may well do I propound this expedient:

1. Let them for forenoon lessons begin with *Propria quæ maribus*, and then proceed to *As in præsenti*, leaving *Quæ genus* to the last, because it is of less use, and harder for children to understand.

2. In getting these rules at first, let them read them all distinctly over, and take notice of the titles or heads, and mark out the most general rules, which they may learn before any of the rest; and to make them the better to understand themselves, you may allow them an English *Propria quæ maribus*, &c., which they may compare all along with that in their grammar, and if at any time you perceive that they do not well apprehend the meaning of a rule, do you illustrate it by instancing some words that they have had in their vocabulary, or elsewhere. This will make them somewhat ready to turn to any rule.

3. At the next going them over, they will be able to say four or six lines at a time, *memoriter*. And then you may let them get all before them, and make them, after they have said a lesson by heart, to construe it by the help of a construing-book, and to decline every noun, and conjugate every verb, by the help of the indexes annexed to the *Propria quæ maribus*, &c., Englished and explained.

4. You may exercise them in this manner by repeating more and more at a time, till they can decline nouns and conjugate verbs, and apply the rules readily to them; and having thus gained them, you may keep them by dividing the whole into ten parts, according to the commonplace heads, thus: the first may be at *Propria quæ maribus*, &c.; *de Regulis generalibus Propriorum, de Regulis generalibus Appellativorum, de prima speciali Regula, et ejus exceptionibus Masculinis, Neutris, Dubiis, et Communibus*. The second at *Nomen crescentis penultima*, &c.; *Syllaba acuta sonat*, &c.; *de secunda speciali Regula, et ejus exceptionibus Masculinis, Neutris, Dubiis, et Communibus*. The third at *Nomen crescentis—Sit gravis*, &c.; *de tertia speciali Regula, et ejus exceptionibus Femininis, Neutris, Dubiis, Communibus, et de Regulis Adjectivorum generalibus*. The fourth at *Quæ genus, de variantibus genus, de defectivis casu, Aptotis, Diptotis, Triptotis, et Vocativo carentibus*. The fifth at *Propria cuncta notes*, &c.; *de defectivis numero, plurali, et singulari*. The sixth at *Hæc quasi luxuriant*, &c.; *de Redundantibus*. The seventh at *As in præsenti, de Simplicium verborum præterito prima, secunda tertia, et quartæ Conjugationis*. The eighth at *Præteritum dat idem, et de Compositorum verborum præteritis*. The ninth at *Nunc ex præterito*, &c.; *de Simplicium verborum, et Compositorum Supinis*. The tenth, *De Præteritis verborum in OR, de geminum præteritum habentibus, de neutro passivis, de verbis præteritum mutantibus, de præterito carentibus, et de Supinum raro admittenti-*

bus. If you add these ten to the twenty parts in the *Accidents*, they may run over the whole thirty in six weeks, saying every morning one except on Saturdays, which are reserved for other occasions. Their noon parts may be in the larger vocabulary, which is commonly printed, with the grounds of grammar, in an easy entrance to the Latin tongue, in which they may peruse a whole chapter at once, and afterward strive who can tell you Latin for the most things mentioned in it. And if at any time the words be not so obvious to their understanding, because (perhaps) they know not the things which they signify, do you tell them what the thing is, and explain the word by another that is more familiar to them.

Their afternoon lessons on Mondays and Wednesdays may be in *Qui mñi*, which containeth pretty precepts of good manners much befitting children to observe, and which are so common in every mean scholar's mouth, that a child would blush to seem ignorant of them. In getting this,

1. Let them repeat two distiches at once, *memoriter*, and if withal you let them get the English verses answerable to the Latin, and printed with the *Grounds of Grammar*, they will fix the Latin better in their memories.

2. Let them construe the lesson grammatically, and to help themselves in that more difficult work, let them make use of the construction made them at the end of their construing-book.

3. Let them read the Latin in the grammatical order, and sometimes into mere English, and then let them parse every word according to that order, giving the rules for the genders of nouns, and the preterperfect tenses and supines of verbs, and applying those of concordance and construction as they come in their way.

4. To exercise them in true writing, it were good if they had a little paper book wherein to write first the Latin and then the English distiches at full length, which they may show when they say their lesson.

5. To find them some employment after the lesson, you may give them some easy dictate out of it to turn into Latin, sometimes by way of question and answer, and sometimes more positively, thus: What shall that scholar do that desireth to be taught? He shall conceive the master's sayings in his mind. *Quid faciet ille discipulus, qui cupit doceri? dicta præceptoris animo suo concipiet;* or thus: A boy that is a scholar, and desireth to be taught, ought to conceive the master's sayings in his mind, and so as to understand them well. *Puer qui discipulus est et cupit doceri, dicta præceptoris animo suo concipere debet, atque illa ut eadem recte intelligat.* And this you may cause any one of them to read, and let the rest correct him in any word he hath made amiss, and be sure they can all give a rule for what they do.

After they have repeated these verses of Mr. Lilly's so often over that they can say them all at once pretty well by heart, they may continue their afternoon lessons in *Cato*, saying two or three distiches at once, according to the directions already given in the preface to that book in English and Latin verse; and when they have gone through a book of it, let them try amongst themselves who can repeat the most of it by heart, as we see Corderius did sometimes exercise his scholars as it appeareth by his *Colloquies*.

Now forasmuch as speaking Latin is the main end of grammar, and there is no better expedient to help children in the ready exercise thereof than frequent perusal of vocabularies for common words, and colloquies for familiar phrases,

and such as are to be used in ordinary discourse, I think it very convenient to make use of *Pueriles Confabulationunculae*, both in English and Latin, on Tuesdays and Thursdays in the afternoons, instead of lessons, thus:

1. Let them read a whole colloquy (if it be not too long) at once both in English and Latin, not minding to construe it *verbatim* at the first going it over, but to render the expressions wholly as they stand, and are answerable one to another, and this will acquaint them with the matter in the book, and enable them to read both the languages more readily.

2. At a second going over, let them construe it grammatically, and then take any phrase or sentence in the present lesson, and make such another by it, changing either the words or some of their *Accidents*, as the present occasion requireth, ex. gr. As they say in the singular number: God save you, *Salve, Sis salvus, jubeo te salvere*, or, *ave*, so make them say in the plural number, God save you, *Salvete, sitis salvi, jubemus vos salvere*, or, *avete*. So likewise when they can say, I thank you, *Habeo tibi gratiam*, or, *Habetur tibi a me gratia*, let them imitate, and alter it by saying, We thank your father, *Habemus patri tuo gratiam*. My mother thanks you, Sir, *Mater habet tibi gratiam, Domine*, or, *Habetur tibi, Domine, a matre mea gratia*.

When they have gone this book so often over as to be well acquainted with its phrases, let them proceed to *Corderius' Colloquia*, which they have also in English and Latin, and which they may construe grammatically, and cull the phrases out of it, to make use of them in common speaking Latin.

Let them have a little paper book wherein to gather the more familiar phrases which they find in every lesson printed in a different character, and let them by often perusal at spare times, and bearing them always about them, get them so readily by heart as to be able to express themselves in Latin by them upon any meet occasion. And this way of exercising them to speak according to their author's expressions, from their first entrance upon Latin, is the best expedient that can be taken to avoid Anglicisms, which otherwise they are very prone to, so long as they are directed only by grammar rules, and forced to seek words in the dictionary, where commonly they light upon that which is most improper.

And that they may now do something of themselves by way of night exercise, let them every evening translate a verse at home out of the 119th Psalm, which I conceive is the most easy for the purpose of making the three concords and some of the more necessary rules of construction familiar to them. In making their translations,

1. Let them be sure to write the English very fair and true, observing its just pauses, and let them also make the like notes of distinction in their Latin.

2. When they come to show their Latins,

1. Let one read and construe a verse.

2. Let another tell you what part of speech every word is, as well English as Latin, and what the English signs denote.

3. Let the rest in order give you the right analysis of every word one by one, and the rules of nouns and verbs, and of concordance and construction. And because these little boys are too apt to blur and spoil their Bibles, and to make a wrong choice of words out of a dictionary, which is a great main and hindrance to them in making Latin, (and caused Mr. Ascham to affirm, that making of Latin marreth children,) I think it not amiss to get that Psalm and some

other Englishes printed by themselves, with an alphabetical index of every word which is proper for its place, right choice of words being indeed the foundation of all eloquence.

On Saturdays, after they can say the Lord's Prayer, the Creed, and the Ten Commandments in English and Latin, they may proceed to the *Assembly's Catechism*, first in English, and then in Latin, or the like. This second form then is to be exercised,

1. In repeating the *Accidents* for morning parts.
2. In saying *Propria quæ maribus, Quæ genus, As in præsentis*, for forenoon lessons.
3. In reading the *larger Vocabulary* for noon parts.
4. In learning *Qui mihi* and afterward *Cato* for afternoon lessons on Mondays and Wednesdays, and *Pueriles Confabulationuncule* and afterward *Corderii Colloquia* on Tuesdays and Thursdays. And
5. Translating a verse out of English into Latin every evening at home, which they may bring to be corrected on Fridays, after all the week's repetitions are ended, and return written as fair as possibly they can write on Saturday mornings, after examinations are ended. And thus they may be made to know the genders of nouns, and preterperfect tenses, and supines of verbs, and initiated to speak and write true Latin in the compass of a second year. So that to children of betwixt seven and nine years of age, in regard of their remediless inanimadvertency, I allow two whole years to practice them well in the rudiments or grounds of grammar, in which I would have the variation of nouns and verbs to be specially minded, for till they be very ready in those, their progress in other things will be full of uncertainties, and troublesomely tedious; but if those be once well got, all other rules which have not (perhaps) been so well understood will more easily (as age increaseth) be better apprehended and put in use.

IV.—*How to make children of the third form perfect in the Latin syntazes, commonly called Verbum Personale; as also to acquaint them with Prosodia, and how to help them to construe and parse, and to write and speak true and elegant Latin.*

Children are commonly taught the Latin syntaxes before they be put to make use of any Latin book besides it; and so they can but say it readily by heart, construe it, and give the force of its rules out of the examples, they are thought to learn it well enough. But the very doing thus much is found to be a work too tedious with many, and therefore some have thought good to lessen the number of the rules, and others to dash out many examples, as if more than one or two were needless; so that when a child hath with them run over this part of the grammar, it is well if he have learned the half of it, or know at all what to do with any of it.

I think it not amiss therefore to show how it may be all gotten understandingly by heart, and settled in the memory by continual practice, which is the life of all learning:

1. Let those then of this third form divide their *Accidents* and rules of nouns and verbs into ten parts, whereof they may repeat one every Thursday morning, and make way for the getting of the syntax on Mondays, Tuesdays and Wednesdays for morning parts.
2. Let them repeat as many rules, *memoriter*, as they are well able, together

with all their examples; and to help their understanding therein, you may do well to show the meaning of every rule and exception beforehand, and to make them compare them with those in the English rules under the same head, and to see which are contained in the Latin which are not in the English, and which are set down in the English which are left out in the Latin.

3. To help them to construe well before they come to say it, let them make use of their construing-books, and that they may better mind what they construe, you may cause them sometimes, when they come to say it, to read the part out of Latin into English.

4. In parsing, let them give you the word governing, and apply the word governed according to the rule, and tell you wherein the exceptions and observations differ from the general rule.

5. Let them have a paper book in quarto, in the margin whereof they may write the first words of every rule and exception; and let them have as many familiar examples (some in English only, and some in Latin only) as may suffice to illustrate the rule more clearly to them, and do you help them, *extempore*, to turn their English ones into Latin, and their Latin ones into English; and having a space left under every head, let them fill it up with pregnant examples, which they meet with as they read their Latin authors, or as they translate English sentences into Latin.

I observe Melancthon and Whittington of old, and Mr. Clarke, Mr. Comenius and others of late, to have made subsidiaries of this nature, which because they seem somewhat to overshoot the capacities of children, who (as Mr. Ascham observes,) are ignorant what to say properly and fitly to the matter, (as some masters are also many times,) I have taken the pains to make a praxis of all the English and Latin rules of construction and syntaxes as they lie in order, and to add two indexes, the first of English words and the Latin for them; the second of Latin words and the English for them, with figures directing to the examples wherein they are to be used.

And for more perspicuity's sake, I take care that no example may touch upon any rule that is not already learned, for fear of puzzling young beginners in this necessary and easy way of translating with the rule in their eye, which doth best direct the weakest understanding.

Now forasmuch as the daily reading of Latin into English is an especial means to increase the knowledge of the tongues, and to cause more heed to be taken to the grammar rules as they are gotten by heart, I would have those in this form to read every morning after prayers four or six verses out of the Latin *Testament*, which they will easily do, having beforehand learned to construe them word by word with the help of their English *Bible*. In this exercise let them all be well provided, and do you pick out only one boy to construe, and then ask any of the others the analysis of a noun or verb here or there, or some rule of construction which you think they have not so well taken notice of as to understand it fully. Hereby you may also acquaint them with the rule and way of construing as it is more largely touched in the following part of this chapter.

N. B.—Those children that are more industriously willing to thrive may advantage themselves very much by the perusal of *Gerard's Meditations*, *Thomas de Kempis*, *St. Augustine's Soliloquies*, or his *Meditations*, or the like pious and profiting books which they may buy both in English and Latin, and continually bear about in their pockets to read at spare times.

Their forenoon lessons may be in *Æsop's Fables*, which is indeed a book of great antiquity and of more solid learning than most men think. For in it many good lectures of morality, which would not (perhaps) have been listened to if they had been delivered in a plain and naked manner, being handsomely made up and vented in an apologue, do insinuate themselves into every man's mind.

And for this reason perhaps it is that I find it and *Gesta Romanorum* (which is so generally pleasing to our country people) to have been printed and bound up both together in Latin, even when the Latin was yet in its dross. And to let you see what Latin *Æsop* was there translated into out of Greek by one Romulus, I will give you the first fable in his words:

De Gallo et Iaspide.

In sterquilinio quidam pulvis gallinaceus, dum quæreretur eocum, invenit margaritam in loco indigno jacentem, quam cum videret jacentem, sic ait; O bona res, in stercore hic jaces. Si te cupidus invenisset, cum quo gaudio rapuisset, ac in pristinum decoris tui statum redisses? Ego frustra te in hoc loco invenio jacentem. Ubi potius mihi escam quæro; et nec ego tibi prosum, nec tu mihi.

Hæc Æsopus illis narrat, qui ipsum legunt et non intelligunt.

No sooner did the Latin tongue endeavor to recover its pristine purity, by the help of Erasmus and other eminent men of learning in his time, but the Greek copy of *Æsop* is translated by him and his contemporaries, every one striving to outstrip another in rendering it into good Latin; and it is observable, that the stationers' copy (which is generally used in schools) is a mere rhapsody of some fragments of these several men's translations; whence it is that one and the same fable is sometimes repeated thrice over in several words, and that the style of the book is generally too lofty in itself for children to apprehend on a sudden; I have for their sakes therefore turned the whole book, such as I found it, into proper English, answerable to the Latin, and divided both into just periods, marked with figures, that they may more distinctly appear, and be more easily found out for use or imitation; and though I observed some words and phrases scarcely allowable in many places of the book, yet I was loth to make any alteration except in a few gross errors, and especially one that quite perverted the sense of the fable, and appeareth to be a mistake in the translator from the Greek copy, which is thus: *Μοιρίς καὶ ἀλώπηξ. Μοιρίς ὄρνις ἐστὶν τρώας ἰσθὺς δένδρεοι τὰς ἀδέντραις ἰθνηται*, which is well Latinized by one, thus: *Aper et vulpes, Aper quum cuidam adstaret arbore, dentes acuebat*. But the unknown translator of this fable (and the rest that yet pass, *sub incerto interprete*) reading perhaps *Μόρος* instead of *μοιρίς*, or finding that *μοιρίς* doth sometimes signify like an adjective, *solitarius*, *solitudines captans*, &c., renders it into pure nonsense, and in other words also differing from the Greek, thus: *Singularis animal, et vulpes; Singularis agrestis, super quadam sedens arbore, dentes acuebat*; which one having lately translated into English verse, with the picture before it, hath prettily devised a rhinoceros to stand by a tree, and to whet his teeth against it; whereas the Latin hath it, *super quadam sedens arbore*, which is impossible for such a huge beast to do. I have therefore put out the word *singularis*, and made it *aper agrestis*, according to an ancient Greek copy which I have, and I English the clause thus: Lib. 2. Fab. 133—A wild boar standing by a tree whetted his tusches. This I have noted, *obiter*, to acquaint the more judicious with my reason for altering those words, and to save the less experienced some

labor in searching out the meaning of them, seeing they pass yet uncorrected in the Latin book.

Let them procure *Æsop's Fables* then in English and Latin, and the rather because they will take delight in reading the tales and the moral in a language which they already understand, and will be helped thereby to construe the Latin of themselves. And herein I would have them take a whole fable and its moral at one lesson, (so that it do not exceed six periods,) which they should first read distinctly; secondly, construe grammatically, and then render the proper phrases; thirdly, parse according to the grammatical order as they construed, and not as the words stand. And then be sure they can decline all the nouns, and conjugate the verbs, and give the rules for the genders of the one, and the preterperfect tenses and supines of the other, as also for the concordance and construction, either out of the English Rules, or Latin Syntax, or both, as they come to have learned them.

Let them sometimes write a fable fairly and truly over, according to the printed book, both in English and Latin, and sometimes translate one, word by word, in that order in which they construed it, and this will inure them to orthography.

That they may learn to observe and get the true Latin order of placing words, and the purity of expression either in English or Latin style, let them imitate a period or more in a lesson, turning it out of English into Latin, or out of Latin into English, thus: whereas they read in English—A cock, as he turned over a dunghill, found a pearl, saying, Why do I find a thing so bright? and in Latin, *Gallus gallinaceus, dum vertit stercorarium offendit gemmam; Quid, inquires, rem sic nitidam reperio?* they may imitate it by this or the like expression: As a beggar raked in a dunghill, he found a purse, saying, Why do I find so much money here? *Mendicus, dum vertit stercorarium, offendit crumenam; quid, inquires, tantum argenti hic reperio?* By thus doing, they may learn to join examples out of their lessons to their grammar rules, (which is the most lively and perfect way of teaching them,) and to fetch a rule out of their grammar for every example, using the grammar to find rules, as they do the dictionary for words, till they be very perfect in them.

Their afternoon parts may be to construe a chapter in *Janua linguarum*, which will instruct them in the nature as well as in the names of things; and after they have construed, let them try who can tell you the most words, especially of those that they have not met with or well observed in reading elsewhere. For afternoon lessons on Mondays and Wednesdays, let them make use of *Mantuanus*, which is a poet both for style and matter, very familiar and grateful to children, and therefore read in most schools. They may read over some of the eclogues that are less offensive than the rest, taking six lines at a lesson, which they should first commit to memory as they are able; secondly, construe; thirdly, parse. Then help them to pick out the phrases and sentences, which they may commit to a paper book; and afterward resolve the matter of their lessons into an English period or two, which they may turn into proper and elegant Latin, observing the placing of words according to prose. Thus out of the five first verses in the first eclogue,

*Fauste, precor, gelida quando pecus omne sub umbra
Ruminat, antiquos paulum recitemus amores.
Ne si forte sopor nos occupet ulla ferarum,
Quæ modo per segetes tacite insidiantur adulas.
Sæviat in pecudes. Melior vigilantia somno.*

One may make such a period as this: Shepherds are wont sometimes to talk of their old loves, whilst the cattle chew the cud under the shade, for fear, if they should fall asleep, some fox, or wolf, or such like beast of prey, which either lurk in the thick woods, or lie in wait in the grown corn, should fall upon the cattle. And, indeed, watching is far more commendable for a prince or magistrate than immoderate or unseasonable sleep.

Pastores aliquando, dum pecus sub umbra ruminat, antiquos suos amores recitare solent; ne, si sopor ipsos occupet, vulpes, aut lupus, aut aliqua ejus generis fera prædabunda, quæ vel in densis sylvis latitant, vel per adultas segetes insidiatur, in pecudes sæviat; immo enimvero, principi vel magistratui vigilantia somno immodico ac intempestivo multo laudabilior est. And this will help to prepare their invention for future exercises, by teaching them to suck the marrow both of words and matter out of all their authors.

The reason why I desire children, especially those of more prompt wits and better memories, may repeat what they read in poets by heart (as I would have them translate into English what they read in prose) is, partly because the memory thrives best by being often exercised so it be not overcharged; and partly because the roundness of the verses helpeth much to the remembrance of them, wherein boys at once gain the quantity of syllables, and abundance of matter for fancy, and the best choice of words and phrases for expression of their mind.

On Tuesdays and Thursdays in the afternoon (after they have done with *Corderius*) they may read *Helvici Colloquia*, (which are selected out of those of Erasmus, Ludovicus Vives, and Schottenius,) and after they have construed a colloquy, and examined some of the hardest grammar passages in it, let them all lay aside their books save one, and let him read the colloquy out of Latin into English, clause by clause, and let the rest give it him again into Latin, every man saying round as it comes to his turn. And this will make them to mind the words and phrases beforehand, and fasten many of them in their memories. Help them afterward to pick out the phrases, and let them write them (as they did others) in a paper book. Cause them sometimes to imitate a whole colloquy, or a piece of one; and let them often strive to make colloquies among themselves, talking two, three or more together about things familiar to them, and inserting as many words and phrases as they can well remember to be proper for the present out of any of their authors; and these they should show you fairly written, with a note of the page and line where they borrowed any expression not used before set down in the margin of their exercise. And this will make them industriously to labor every day for variety of expressions, and encourage them much to discourse when they know themselves to be certain in what they say, and that they can so easily come by Latin to speak their minds upon any occasion.

But if instead of *Mantuan* you think good sometimes to make use of *Cæcilius's Dialogues*, you may first make them read the history in the Bible by themselves apart, and then hear them construe it dialogue-wise, pronouncing every sentence as pathetically as may be afterward. One may read it in English, and the rest answer him in Latin, clause by clause, as is already mentioned concerning the *Colloquia*.

And to help them somewhat the better to construe themselves, you may direct them (according to the golden rule of construing commended and set

down at large by industrious Mr. Brinaley, in the 93d and 94th pages of his *Grammar School*) to take

1. The vocative case and that which dependeth upon it.

2. The nominative case of the principal verb and that which dependeth upon it.

3. The principal verb and that which serveth to explain it.

4. The accusative case and the rest of the cases after it. And herein cause them to observe that interrogatives, relatives and conjunctions are to go before all other words in construing; and that the adjective and the substantive, the adverb and the verb, the preposition and its casual word, go for the most part together. But be sure to teach them often to cast the words of a period into their natural or grammatical order, according to which they must construe, and to know the signification of every word and phrase proper for its place; and withal, let them have in mind the chief matter, drift and circumstances of a place according to the verse:

Quis, cui, causa, locus, quo tempore, prima, sequela,

Which biddeth one to heed who speaks, what is spoken to whom he speaks, upon what occasion or to what end he speaks, at what time a thing was done or spoken, what went immediately before and what followeth next after. And if either the construing be against sense or grammar rule, let them try again another way.

To exercise them in something (besides the getting of grammar parts) at home, let them every night turn two verses out of the proverbs of Solomon into Latin, and write out two verses of the New Testament grammatically construed; and let them evermore take heed and spell every word aright, and to mark the pauses or notes of distinction in their due places, for by this means they will profit more in orthography than by all the rules that can be given them; and they will mind etymology and syntax more by their own daily practice than by ten times repetition without it.

On Saturdays, after they can say the *Assembly's Catechism* in English and Latin, you may let them proceed with *Perkins' Six Principles*, and when they have repeated as much as they can well by heart, you may cause them to read it out of English into Latin, yourself ever and anon suggesting to them the propriety of words and phrases where they are at a loss, and directing them, after they have once made it grammatically, to cast it into the artificial order of Latin style. And then let them go to their places, and write it fairly and truly in a little paper book for the purpose.

If out of every lesson, as they pass this little catechism, you extract the doctrinal points by way of propositions, and annex the proofs of Scripture to them which are quoted in the margin, as you see Mr. Perkins hath done in the beginning of the book, and cause your scholars to write them out all fair and at large as they find them in their Bibles, it will be a profitable way of exercising them on the Lord's day, and a good means to improve them in the real knowledge of Christianity.

Now forasmuch as I have observed that children about nine years of age (and few till then) begin to relish grammar so as of themselves to seek into the meaning of rules thereby to conceive the reason of speech, I now judge it requisite for this form to be made thoroughly acquainted with the whole body of it. Therefore, after they have gone over the plain syntax two or three times

by morning parts as is showed, and have got it pretty well by heart, (for which I judge three-quarters of a year will be time sufficient,) you may let them divide the whole syntax into twelve parts, reckoning them according to the several heads of it, thus: The first, *De concordantia nominativi et verbi, substantivi et adjectivi, relativi, et antecedentis*; the second, *De constructione substantivorum, et adjectivorum cum genitivo*; the third, *De constructione adjectivorum cum dativo, accusativo, et ablativo*; the fourth, *De constructione pronominum*; the fifth, *De constructione verborum cum nominativo et genitivo*; the sixth, *De constructione verborum cum dativo, et accusativo*; the seventh, *De constructione verborum cum ablativo*; the eighth, *De gerundiis et supinis, et de tempore et loco*; the ninth, *De constructione impersonalium et participiorum*; the tenth, *De constructione adverbiorum*; the eleventh, *De constructione conjunctionum*; the twelfth, *De constructione prepositionum, et interjectionum*. All of which twelve you may add to the thirty parts in the *Accidents* and *Propria quæ maribus*, &c., and let your scholars bestow a month's time together in repeating and examining the *Accidents*, and thus far of the grammar, (both for parts and lessons,) till they have thoroughly made it their own; and that they may the better conceive how it hangeth together, and what use they are to make out of its several parts, you should often make them run over the heads of it, and give them an analysis of their dependency one upon another.

After this they may more understandingly proceed to the figures of words and construction, the definitions whereof and their examples they need only get by heart; and for that purpose do you note them out with a pen, and in explaining them give as many examples as may make them fully to apprehend their meaning. But when they have said the definition of one or more figures at a part by heart, you may cause them to construe all they find concerning it; and to help them in so doing, they that are otherwise less able may make use of Mr. Stockwood's little book of *Figura construed*. Then let them go on to *Prosodia*, for their more easy understanding of which, as they proceed in it, you may tell them the meaning of it in brief, thus:

Prosodia, being the last part of grammar, teacheth the right pronunciation of words, or the tuning of syllables in words as they are pronounced; and therefore it is divided into a tone, or accent, a spirit, and a time, whereof a tone ordereth the tune of the voice, showing in what syllables it is to be lifted up, and in what to be let down, and in what both to be lifted up and let down; so that there are three tones,—a grave, which is seldom or never made but in the last syllable of such words as ought to have had an acute in the last syllable, and that in the contexture of words in this manner: *Nē si forte sopor nos occupet*; an acute, which is often used to distinguish some words from others, as *unā*, together, *sedulō*, diligently, remain acuted at the end of a speech, and in continuation of speech have their acute accents turned into a grave to make them differ from *una*, one, and *sedulo*, diligent; a circumflex, which is often marked to denote a lost syllable, as *amârunt* for *amaverunt*. A spirit ordereth the breath in uttering syllables, showing where it is to be let out softly and where sharply, as in *ara*, an altar, and *hara*, a swine coat. The mild spirit is not marked, but the weak letter *n* being used as a note of aspiration only, and not reckoned as a consonant, serveth to express the sharp spirit. There are three rules of accent which are changed by difference, transposition, attraction, concision and idiom. Time sheweth the measure how long a syllable is to be in pronouncing,

not at all regarding the tone. A long syllable is to be a longer while, and a short a shorter while in pronouncing. Of long and short syllables put together orderly, feet are made, and of feet, verses.

4. Now to know when a syllable is long or short there are rules concerning the first, the middle and last syllables, so that if one mind in what part of a word the syllable stands, he may easily find the rule of its quantity.

The sum of prosodia being thus hinted to them, they may get it by heart at morning parts; and if they can not construe it well by themselves, they may be helped by a little book made by Barnaby Hampton, called *Prosodia construed*. But be sure that they can read you every part into English, and tell you the true meaning of it. Your own frequent examination will be the best way to know whether they understand it or not. And to prepare them for the practice of it in making verses, I would first let them use it in learning to scan and prove hexameter verses only out of *Cato* or *Mantuan*, or such authors as they have read, thus:

1. Let them write a verse out, and divide it into its just feet, giving a dash or stroke betwixt every one; and let them tell you what feet they are, and of what syllables they consist, and why they stand in such a place, as

Si Deus- est ani-mus no-bis ut- carmina- dicunt.
Hic tibi- præcipu- è sit- pura- mente co- lendus.

2. Let them set the mark of the time or quantity over every syllable in every foot, and give you the reason (according to the rules) why it is there noted long or short, as

Si Dēūs ēst ānī-mūs nō-bīs ūt-cārminā- dicūnt.
Hic tībī- præcīpū- ē sīt- purā-mēntē cō-lēndūs.

Let them now divide *Figura* and *Prosodia* into six parts; the first, *De figuris dictionis, et constructionis*; the second, *De tonis, et spiritibus*; the third, *De carminum ratione, et generibus*; the fourth, *De quantitate primarum syllabarum*; the fifth, *De medietis syllabis*; and the sixth, *De ultimis syllabis*; which they may add to the forty-two parts aforementioned, and keep by constant repetition of one of them every day till they can say them all very well by heart, and give a perfect account of any thing in them.

Then let them begin the *Accidents* and go through it, and the whole Latin grammar in twelve parts, only construing and giving an account of the by-rules, but saying all the rest by heart so that the first part may be the introduction; the second, the construction of the eight parts of speech; the third, orthography; the fourth, etymology so far as concerns the species, figure, number, case and gender of nouns; the fifth, concerning the declension (including *Quæ genus*) and the comparison of nouns; the sixth, concerning a pronoun and a verb; the seventh, concerning a participle, an adverb, a conjunction, a preposition, and an interjection; the eighth, syntaxes so far as concerns the concords and the construction of nouns; the ninth, concerning the construction of verbs; the tenth, concerning the construction of participles, adverbs, conjunctions, prepositions and interjections; the eleventh, concerning figures, tones and spirits; the twelfth, concerning the manner of verses and the quantity of syllables.

Now in repeating these parts I do not enjoin that only one boy should say all, though I would have every one well prepared to do so; but that one should say one piece, and another another, as you please to appoint either orderly

throughout the form, or picking out here and there a boy at your own discretion. According to this division, the whole *Accidents* and *Grammar* may be run over once in a month's space, and continued in the upper forms by repeating one part only and constantly in a week so that it may never be forgotten at the school.

This form, in short, is to be employed about three-quarters of a year,—

1. In reading four or six verses out of the *Latin Testament* every morning immediately after prayers.

2. In repeating *Syntaxes* on Mondays, Tuesdays and Wednesdays, and the *Accidents* and *Propria quæ maribus*, &c., on Thursdays for morning parts.

3. In *Æsop's Fables* for forenoon lessons.

4. *Janua Linguarum* for afternoon parts.

5. In *Mantuan* for afternoon lessons on Mondays and Wednesdays, and in *Helvicius' Colloquies* on Tuesdays and Thursdays.

6. In the Assembly's *Latin Catechism* on Saturdays for lessons.

7. In translating every night two verses out of the *Proverbs* into Latin, and two out of the *Latin Testament* into English, which (with other dictated exercises) are to be corrected on Fridays after repetitions are ended, and shown fairly written on Saturday mornings; but because their wits are now ripened for the better understanding of grammar, and it is necessary for them to be made wholly acquainted with it before they proceed to the exact reading of authors and making school exercises, I would have them spend one-quarter of a year chiefly in getting *Figura* and *Prosodia*, and making daily repetition of the whole *Accidents* and common grammar; so that this third year will be well bestowed in teaching children of between nine and ten years of age the whole grammar, and the right use of it, in a method answerable to their capacities, and not much differing from the common mode of teaching.

V.—How to try children to the utmost whether they be well grounded in the grammar; and how to go more expeditiously to work in teaching the Latin tongue to those that are at years of discretion.

It is an ordinary course in most of our grammar schools for the usher to turn over his scholars to the higher master after they have gone through the grammar and (with some) been exercised in construing and parsing here and there a piece of the forementioned lower authors, and in turning English sentences or dictates into Latin; but oftentimes it cometh to pass that partly through the usher's want of skill or care to insist upon those things chiefly and most frequently which are the most necessary to be kept in mind, and partly through children's want of heed who are apt to huddle over all parts and lessons alike, not observing what use they are to make of any one in particular more than another, there is no sure foundation laid for the master to build safely upon, which causeth him (if he be not very discreet) to cast off many boys as unfit by him to be further wrought upon, or continually to fret and grieve himself to see his scholars so often mistake themselves in any task or exercise that he setteth them about; and the poor children, being all this while sensible of their own imperfectness in the first grounds, are daunted to see their master so often angry with them, and that they are no better able to perform their work to his better satisfaction, which they would gladly do if they did but a little understand how to go about it. Some also preconceiving a greater difficulty to be in

learning than they have hitherto met withal, and not knowing how to encounter it, become utterly discouraged with the thoughts of a new change, and choose rather to forsake the school than proceed to obtain the crown of their by-past labors,—I mean the sweetness of learning which they are now to gain under the master; for after children are once well grounded by the usher, they will go on with ease and cheerfulness under the master, delighting to read pure language and variety of matter in choice authors and to exercise their wits in curious fancies; and it will be an extraordinary comfort to the master to see his scholars able to run on of themselves if he but once show them the way to perform any task that he propoundeth to them. It is necessary therefore for the master, before he take scholars to his only charge, to see first that they understand the rudiments or grounds of grammar, and then the whole grammar itself, and that they can thoroughly practice them; but especially to help those in the understanding and exercise thereof that by reason of sickness or the like accident have been oftener absent, or that have not been so long at the school as their fellows, or who by reason of their age or stature will quickly think it a shame to be left under the usher behind the rest. Now to try whether a child be well grounded or not this course may be taken:

1. Let him take some easy fable in *Æsop*, or any other piece of familiar Latin, and let him construe it of himself according to the directions given in my *Grounds of Grammar*, l. 2, c. 13.

2. Then let him write down the English alone, leaving a large space between every line wherein he should afterward write the Latin words answerable to the English, ex. gr.:

De senex vocante mortem.
Of an old man calling death.

Quidam senex portans fascem lignorum super humeros ex nemore,
An old man, carrying a bundle of sticks upon his shoulders out of a forest,
cum defessus esset longa via, vocavit mortem, fasces
when he was weary with the long way, called death, the bundle being
deposito humi. Ecce! mors advenit, et rogat causam quamobrem
laid down on the ground. Behold! death cometh, and asketh the cause why
vocaverat .se. Tunc senex ait, ut imponeres hunc fascem
he had called him. The the old mā saith, that thou mightest lay this bundle of
lignorum super humeros.
sticks upon my shoulders.

3. Let him next tell you what part of speech every word is, as well English as Latin, and write them down (as I have also shown formerly) under so many figures, joining the English figures to the words to which they belong, beginning to reckon and pick up first all the nouns, and then the rest orderly after this manner:

1.

Senex, an old man.
Fascem, a bundle.
Lignorum, of sticks.
Humeros, shoulders.
Nemore, a forest.
Longa, long.

Via, a way.
Mortem, death.
Fasces, the bundle.
Humi, on the ground.
Mors, death.
Causam, the cause.

2.

Quidam, an or one.
Se, him.

Hunc, this.

Defessus esset, was weary.
Vocavit, called.
Advenit, cometh.
Vocaverat, had called.

Portans, carrying.

Cum, when.
Ecce, behold.

Que, and.
Quamobrem, wherefore.

Super, upon.

3. *Rogat*, asketh.
Imponeres, thou mightest lay.
At, saith.

4. *Deposito*, being laid.

5. *Tunc*, then.

6. *U*, that.

7. *Ex*, out of.

4. Let him decline any one or more nouns, and conjugate any **one** or all the verbs throughout, and then write them down at large according to **what** I have formerly directed and is practiced in part in Merchant Tailors' School, as is to be seen in the *Probation Book* lately printed by my noble friend **and** most actively able schoolmaster, Mr. W. Dugard, only I would have him **join** the English together with the Latin.

5. Let him give the analysis of any word, first at large by way **of** question and answer, and then sum it up in short, as to say or write it down **thus**:

The Analysis of a Noun Substantive.

What part of speech is *lignorum*, of sticks?

Lignorum, of sticks, is a noun.

Why is *lignorum* a noun?

Because *lignum*, a stick, is the name of a thing that may be seen.

Whether is *lignorum* a noun substantive, or a noun adjective?

Lignorum is a noun substantive, because it can stand by itself in **signification**, and requireth not another word to be joined with it to shew its **signification**.

Whether is *lignorum* a noun substantive proper, or a noun **substantive** common?

Lignorum is a noun substantive common because it is common to **more** sticks than one.

Of what number is *lignorum*?

Lignorum is of the plural number because it speaketh of more than **one**.

Of what case is *lignorum*?

Lignorum, of sticks, is of the genitive case because it hath the token **of**, and answereth to the question *whereof*? or *of what*?

Of what gender is *lignorum*?

Lignorum is of the neuter gender because it is declined with this **article** *hoc*.

Why is *lignorum* declined with this **article** *hoc*?

Because all nouns in *um* are neuters according to the rule in *Propria quæ maribus, omne quod exit in um, &c.*; or *Et quod in on vel in um fiunt, &c.*

Of what declension is *lignorum*?

Lignorum is of the second declension because its genitive case **singular** endeth in *i*.

How is *lignorum* declined?

Lignorum is declined like *regnum*, thus:

Sing. nom., *hoc lignum*; gen., *hujus ligni*, &c.

Lignorum is a noun substantive common, of the plural number, genitive case, neuter gender and second declension, like *regnorum*.

The Analysis of a Noun Adjective.

What part of speech is *longâ*, long?

Longâ is a noun.

Why is *longâ* a noun?

Because it is the name of a thing that may be understood.

Whether is *longâ* a noun substantive, or a noun adjective?

Longâ is a noun adjective because it can not stand by itself in signification, but requireth to be joined with another word, as *longâ viâ*, with the long way.

Of what number is *longâ*?

Longâ is of the singular number because its substantive *viâ* is of the singular number.

Of what case is *longâ*?

Longâ is of the ablative case because its substantive *viâ* is of the ablative case.

Of what gender is *longâ*?

Longâ is of the feminine gender because its substantive *viâ* is of the feminine gender.

Of what declension is *longâ*?

Longâ is of the first declension.

How is *longâ* declined?

Longâ is declined like *bonâ*: Sing. nom., *longus*, *a*, *um*.

By what rule can you tell that *longâ* is of the feminine gender?

By the rule of the genders of adjectives, *At si tres variant voces*, &c.

Longâ is a noun adjective, of the singular number, ablative case and feminine gender, declined like *bonâ*.

The Analysis of a Pronoun.

What part of speech is *se*, him?

Se is a pronoun because it is like to a noun, or put instead of the noun *mortem*, death.

What kind of pronoun is *se*?

Se is a pronoun primitive because it is not derived of another.

Of what number is *se*?

Se is of the singular number because it speaketh but of one.

Of what case is *se*?

Se is of the accusative case because it followeth a verb, and answereth to the question *whom*?

Of what gender is *se*?

Se is of the feminine gender because the noun *mortem*, that it is put for, is of the feminine gender.

Of what declension is *se*?

Se is of the first declension of pronouns, and it is thus declined: Sing. et plur. nom., *caret*; gen., *eui*, &c.

Of what person is *se*?

Se is of the third person because it is spoken of.

Se is a pronoun primitive, of the singular number, the accusative case, feminine gender, first declension and third person.

The Analysis of a Verb.

What part of speech is *imponeres*, thou mightest lay upon?

Imponeres is a verb because it signifieth to do.

What kind of verb is *imponeres*?

Imponeres is a verb personal because it hath three persons.

What kind of verb personal is *imponeres*?

Imponeres is a verb personal active because it endeth in *o*, and betokeneth to do, and by putting to *r* it may be a passive.

Of what mood is *imponeres*?

Imponeres is of the subjunctive mood because it hath a conjunction joined with it, and dependeth upon another verb going before it.

Of what tense is *imponeres*?

Imponeres is of the preterimperfect tense because it speaketh of the time not perfectly past.

Of what number is *imponeres*?

Imponeres is of the singular number because its nominative case is of the singular number.

Of what person is *imponeres*?

Imponeres is of the second person because its nominative case is of the second person.

Of what conjugation is *imponeres*?

Imponeres is of the third conjugation, like *legeres*, because it hath *e* short before *re* and *ris*.

How do you conjugate *imponeres*?

Impono, imponis, imposui, imponere; imponendi, imponendo, imponendum; impositum, impositu; imponens, impositurus.

Why doth *impono* make *imposui*?

Because *præteritum dat idem, &c.*

Why doth *imposui* make *impositum*?

Because *compositum ut simplex formatur, &c.*

Imponeres is a verb personal active, of the subjunctive mood, preterimperfect tense, singular number, second person and third conjugation, like *legeres*.

The Analysis of a Participle.

What part of speech is *deposito*, being laid down?

Deposito is a participle derived of the verb *depono*, to lay down.

Of what number is *deposito*?

Deposito is of the singular number because its substantive *fasce* is of the singular number.

Of what gender is *deposito*?

Deposito is of the masculine gender because its substantive *fasce* is of the masculine gender.

By what rule can you tell that *deposito* is of the masculine gender?

At si tres variant voces, &c.

Of what case is *deposito*?

Deposito is of the ablative case because its substantive *fasce* is of the ablative case.

How is *deposito* declined?

Like *bonus*, a noun adjective of three diverse endings: Sing. nom., *depositus*, *deposita*, *depositum*.

Of what tense is *deposito*?

Of the preter tense because it hath its English ending in *d*, and its Latin in *tus*.

How is *depositus* formed?

Of the latter supine *depositu* by putting to *s*.

Deposito is a participle, of the singular number, masculine gender, ablative case, and is declined like *bonus*, being of the preter tense, and formed of the later supine of the verb *depono*.

The Analysis of an Adverb.

What part of speech is *cum*, when?

Cum is an adverb because it is joined to the verb *defessus esset* to declare its signification.

What signification hath *cum*?

Cum hath the signification of time.

But why is not *cum* a preposition in this place?

Because it hath not a casual word to serve unto.

Cum is an adverb of time.

The Analysis of a Conjunction.

What part of speech is *que*, and?

Que is a conjunction because it joineth words together.

What kind of conjunction is *que*?

Que is a conjunction copulative because it coupleth both the words and sense.

Que is a conjunction copulative.

The Analysis of a Preposition.

What part of speech is *ex*, out of?

Ex is a preposition because it is set before another part of speech in apposition, as *ex nemore*, out of a forest.

What case does *ex* serve to?

Ex serveth to the ablative case.

Ex is a preposition serving to the ablative case.

6. Having thus tried your young scholar how he understandeth the introduction or first part of his *Accidents*, (for whom, if you find him expert therein, one example may serve, but if not, you may yet make use of more until he can perfectly and readily give you an account of any word,) you may further make trial how he understandeth the rules of concordance and construction in the second part of the *Accidents* by causing him to apply the rules to every word as he meeteth with it in the grammatical order, thus:

Quidam is of the nominative case, singular number and masculine gender, and agreeth with its substantive *senex* because the adjective, whether it be a noun, pronoun, or participle, agreeth with its substantive, &c.

Senex is the nominative case coming before *recitat* (which is the principal verb) because the word that answereth to the question *who?* or *what?* shall be the nominative case to the verb, and shall be set before the verb.

Portans is of the nominative case, singular, number and masculine gender, and agreeth with its substantive *senex*, because the adjective, whether it be a noun, &c.

Fascem is of the accusative case, governed of *portans*, because participles govern such cases, &c.

Lignorum is of the genitive case, governed of *fascem*, because when two substantives come together, &c.

Super is a preposition which serveth to both the accusative and the ablative case, but here it serveth to the accusative.

Humeros is of the accusative case, governed of the preposition *super*.

Ex is a preposition which serveth to an ablative case.

Nemore is of the ablative case, governed of the preposition *ex*.

Cum is an adverb of time.

Defessus esset is of the singular number and third person, and agreeth with its nominative case *ille*, understood, because a verb personal agreeth with, &c.

Longâ is of the ablative case, singular number and feminine gender, and agreeth with its substantive *viâ*, because the adjective, whether it be, &c.

Viâ is of the ablative case, governed of *defessus esset*, because all verbs require an ablative case of the instrument, &c.

Vocavit is of the singular number and third person, and agreeth with its nominative case *senex*, because a verb personal, &c.

Mortem is of the accusative case, and followeth the verb *vocavit*, because verbs transitives are all such, &c.

Fasce is of the ablative case absolute because a noun or pronoun substantive joined with a participle, &c.

Deposito is of the ablative case, singular number and masculine gender, and agreeth with its substantive *fasce*, because the adjective, whether it be, &c.

Humi is of the genitive case because these nouns, *humi*, *domi*, &c.

Ecce is an adverb of showing.

Mors is the nominative case coming before the verb *advenit* because the word that answereth to the question *who?* or *what?* &c.

Advenit is of the singular number and third person, and agreeth with its nominative case *mors* because verb personal, &c.

Que is a conjunction copulative.

Rogat is of the indicative mood and present tense because conjunctions, copulatives and disjunctives most commonly, &c.

Causam is of the accusative case, and followeth the verb *rogat*, because verbs transitives are all such, &c.

Quamobrem is an adverb of asking.

Vocaverat is of the singular number and third person, and agreeth with its nominative case, *ille*, understood, because a verb personal agreeth, &c.

Se is of the accusative case, and followeth the verb *vocaverat*, because verbs transitives are all such, &c.

Tunc is an adverb of time.

Senex is the nominative case coming before the verb *ait* because the word that answereth to the question *who?* or *what?* &c.

Ait is of the singular number and third person, and agreeth with its nominative case *senex*, because a verb personal, &c.

Ut is a conjunction causal.

Imponeres is of the singular number and second person, and agreeth with its nominative case *tu*, understood, because a verb personal, &c.

Hunc is of the accusative case, singular number and masculine gender, and agreeth with its substantive *fascem*, because the adjective, whether it be, &c.

Fascem is of the accusative case, and followeth the verb *imponeres*, because verbs transitives, &c.

Lignorum is of the genitive case, governed of *fascem*, because when two substantives, &c.

Super is a preposition which here serveth to an accusative case.

Humeros is of the accusative case because *super* is a preposition serving to an accusative case.

7. Try him yet a little further by causing him to turn an English into Latin in imitation of this fable, and to observe the artificial order in placing all the words, ex. gr.:

A woman bearing a basket of plums upon her head out of a garden, when she was weary with the heavy burden, sat down, having set her basket upon a bulk. Behold! a boy came to her and asked her if she would give him any plums. Then the woman said, "I will give thee a few if thou wilt help me to set this basket upon my head."

Quædam mulier prunorum calathum super caput exhorto portans, cum gravi onere defessa esset, calatho super scamnum posito, desedit. Ecce! puer advenit, numque daret sibi pruna rogavit. Tunc mulier, pauca tibi dabo, siquidem opem mihi feres, ut hunc calathum super caput meum imponam, ait.

When you have found a child sufficiently expert in the rudiments, go on also to try how far he understandeth the whole art of grammar by this or the like praxis.

1. Let him take a piece of one of *Castation's Dialogues*, or the like easy piece of Latin, and write it down according to his book; but as he writeth it, let him divide every word of more syllables according to the rules of right spelling, and give you an account of every letter and syllable and note of distinction according to the rules of orthography, and of every accent that he meeteth withal, as also of the spirits and quantities of syllables according to the rules in prosodia, ex. gr.:

Serpens. Eva.

S. Cur ve-tu-it vos De-us ve-sci ex o-mni-bus ar-bo-ribus po-ma-ri-i? E. Li-cet no-bis ve-sci fru-cti-bus ar-bo-rum po-ma-ri-i; tan-tum De-us no-bis in-ter-di-xit e-a ar-bo-re, quæ est in me-di-a po-ma-ri-o, ne ve-sce-re-mur fru-ctu e-jus, ne-ve e-ti-am at-tin-ge-re-mus, ni-si vel-le-mus mo-ri. S. Ne-qua-quam mo-ri-e-mi-ni pro-pte-re-a, sed scit De-us, si com-e-de-ri-tis de e-o, tum o-cu-los vo-bis a-per-tum i-ri, at-que i-la vos fo-re tan-quam De-os, sci-en-tes boni, at-que mali. I-ta pla-ne vi-de-tur, et fru-ctus i-pse est pul-cher sa-nè vi-su: ne-sci-o an sit i-la dul-cis gu-sta-tu; ve-run-ta-men ex-pe-ri-ar.

Now if you ask him why he writeth *Serpens, Eva, Cur, Deus, Nequaquam* and *Ita* with great letters, and all the other words with little letters, he can tell you (if he ever learned or minded his rules) that proper names, beginnings of sentences, and words more eminent than others, are to begin with a great letter, and in other places small letters are to be used. If you ask him why he spelleth *ve-tu-it* and not *vet-u-it*, he will say, because a consonant set betwixt two vowels belongeth to the latter.

If you ask him why he spelleth *ve-sci* and not *ves-ci*, he will answer you,

because consonants which can be joined in the beginning of a word must not be parted in the middle of it.

If you ask him why he spellet *ar-bo-ri-bus* and not *a-rbo-ri-bus*, he will tell you, because consonants which can not be joined in the beginning of a word must be parted in the middle of it.

If you ask him why he spellet *vel-le-mus* and not *ce-lemus*, nor *vell-emus*, he will tell you, because if a consonant be doubled the first belongeth to the foregoing and the latter to the following syllable.

If you ask him why he spellet *com-e-de-ri-tis* and not *co-me-de-ri-tis*, he will tell you, because in words compounded every part must be separated from another; and if you again ask him concerning the same syllable, why it is *com* and not *con*, seeing the verb is compounded of *con* and *edo*, he will answer you, because in words compounded with a preposition we must respect the ear and good sound.

Likewise if you proceed to examine him touching the notes of distinction, why one is made and not another, he will tell you that a comma (,) distinguisheth the shorter parts of a sentence, and stayeth the breath but a little while in reading; that a colon (:) divideth a period in the middle, and holdeth the breath somewhat long; that a semicolon (;) stayeth the breath longer than a comma, but not so long as a colon; that a period (.) is made at the end of a perfect sentence where one may give over reading if he will; and that an interrogation (?) denoteth that there is a question to be asked.

If you examine him touching the accents, why there is a grave accent in *tantum*, he will tell you it is to make it, being an adverb, to differ from a noun; and that because of contexture of words the accent which ought to have been an acute is turned into a grave.

If you ask him why there is a circumflex accent in *ea*, he will tell you it is to denote that *ea* is of the ablative case singular which hath *a* long.

And if you ask him why *neve* hath an acute accent, he will tell you that *ne* hath changed its grave accent into an acute because the particle *ve* hath inclined its own accent into it.

If you ask him why *omnibus arboribus* are not sharply uttered, he will tell you, because they do not begin with *h*, which is the note or letter of aspiration.

He will quickly show you whether he understandeth his rules touching the quantities of syllables, or not, by writing out a sentence or two, and marking the syllables of every word in this manner:

Cūr vētūt vōs Dēūs vēscī ex ōmnībūs arbōribūs pōmārī? licēt nobīs vēscī fructībūs arbōrūm pōmārī tantūm Dēūs nobīs intēdixit ēā arbōrē, quā ēst in mediō pōmārīō, nē vēscērēmūr fructū ejūs, nēvē etiā attingērēmūs, nisi vēllēmūs mōri.

2. Let him cast the words of his author into the grammatical order, and analyze every one of them exactly according to etymology and syntaxes (which is the usual way of parsing) after this manner:

Cūr Deus vetuit vos vesci ex omnibus arboribus pomarii? licet nobis vesci fructibus arborum pomarii; tantum Deus interdixit nobis eā arbore, quā est in medio pomario, ne vesceremur fructu ejus, neve etiam attingeremus, nisi vellemus mori.

Cūr is an adverb of asking.

Deus is a noun substantive common, of the singular number, nominative case, masculine gender, (because *mascula* in *er*, &c.) of the second declension: Sing. nom., *hic Deus*; gen., *hujus Dei*, &c.

It maketh its vocative case *o Deus*, and wanteth the plural number, because *Deus verus caret plurali*. It cometh before the verb *vetuit*.

Vetuit is a verb personal neuter, of the indicative mood, præterperfect tense, singular number and third person, because it agreeth with its nominative case *Deus* by the rule *Verbum personale coheret, &c.* It is of the first conjugation: *Veto, vetas, vetui*; (*velo quod vetui dat*.) *vetare*; *vetandū, vetando, vetandum, vetitum, vetitus*; (*Quod dat ut dat itum*.) *vetans vetiturus*.

Vos is a pronoun primitive, of the plural number, the accusative case, the masculine gender, and the first declension: Sing. nom., *tu*; gen., *tui*, &c. It hath the vocative case: *Et prænominā præter*, &c. It is of the accusative case after *vetuit* because *verba transitiva, &c.*

Vesci is a verb deponent like *legi*: *Vescor, vesceris, vel vescere, pastus sum vel fui, vesci pastus vescendus*, because *sic poscunt vescor, medeor, &c.* It is of the infinitive mood and present tense, without number and person, and is governed of *vetuit*, because *quibusdam tum verbis, &c.*

Ex is a preposition serving to the ablative case.

Omnibus is a noun adjective of three articles like *tristibus*: *Hic et hæc omnis, et hoc omne*, because *sub geminā, &c.*

It is of the plural number, the ablative case and feminine gender, and agreeth with its substantive *arboribus*, because *adjectivum cum substantivo, &c.*

Arboribus is a noun substantive common like *lapidibus*: Sing. nom., *hæc arbor*; gen., *hujus arboris, &c.*; *grando, fides, &c.* It is of the ablative case, singular number, feminine gender and third declension, governed of *ex*, the preposition which requireth an ablative case.

Pomarii is a noun substantive common like *regni*: Sing. nom., *hoc pomarium*; gen., *hujus pomarii, &c.*; *omne quod exit in um, &c.* It is of the singular number, the genitive case, the neuter gender and second declension, and is governed of the substantive *arboribus*, because *quum duo substantiva, &c.*

Licet is a verb impersonal declined in the third person singular only: *Licet, licebat, licuit et licitum est, &c.*; *et licet adde, quod licuit, licitum*. It is of the indicative mood, present tense, singular number and third person, and hath no nominative case, because *impersonalia præcedentem, &c.*

Nobis is a pronoun primitive, of the plural number, dative case, masculine gender and first declension: Sing. nom., *ego*; gen., *mei*. It wants the vocative case because *et prænominā, &c.*; and is governed of *licet* because *in dativum feruntur, &c.*

Vesci ut supra.

Fructibus is a noun substantive common like *manibus*: Sing. nom., *hic fructus*; gen., *hujus fructus, &c.*; *mascula in er, &c.* It is of the ablative case, plural number, masculine gender and fourth declension, governed of *vesci*, because *fungor, fruor, ulor, &c.*

Arborum ut supra in arboribus. It is of the genitive case plural, governed of *fructibus*, because *quum duo substantiva, &c.*

Pomarii ut supra.

Tantum is an adverb of quantity made of an adjective of the neuter gender, because *aliquando neutra adjectiva, &c.*

Deus ut supra, but here it cometh before the verb *interdixit*.

Interdixit is a verb personal active compounded of *inter* and *dico*, conjugated like *legit*: *Interdico, is, xi*, because *præteritum dat idem, &c.*; *interdixi interdico*.

tum, because *compositum ut simplex*, &c. It is of the indicative mood, preterperfect tense, singular number and third person, and agreeth with its nominative case *Deus*, because *verbum personale*, &c.

Nobis ut suprà, but here it is the dative case, governed of *interdixit*, because *dativum postulanti*, &c.

Ea is a pronoun primitive of the second declension: Sing. nom., *is, ea, id*; gen., *ejus*, &c. It is of the singular number, ablative case and feminine gender, and agreeth with its substantive *arbore*, because *ad eundem modum*, &c.

Arbore ut suprà, but here it is the ablative case singular, governed of *interdixit*, which verb doth often govern a dative case with an ablative, though we have no express rule for it in our grammar.

Quæ is a pronoun relative of the second declension: Sing. nom., *qui, quæ, quod*; gen., *cujus*, &c. It is of the singular number, feminine gender, and third person, and agreeth therein with its antecedent *arbore*, because *relativum cum antecedente*, &c. It is of the nominative case, and cometh before the verb *est*, because *quoties nullus nominativus*, &c.

Est is a verb personal neuter substantive, having a proper manner of declining: *Sum, es, fui*, &c., because *et à fuo sum fui*. It is of the indicative mood, present tense, singular number and third person, and agreeth with its nominative case *quæ*, because *verbum personale*, &c.

In is a preposition serving to the ablative case.

Medio is a noun adjective of three terminations like *bono*: Sing. nom., *medius, media, medium*, &c.

At si tres variant voces, &c. It is of the ablative case, neuter gender and singular number, and agreeth with its substantive *pomario*, because *adjectivum cum substantivo*. *Pomario ut suprà*, but here it is of the ablative case because *in* is a preposition serving to the ablative case.

Ne is an adverb of forbidding, and governeth a subjunctive mood: *Ne prohibendâ*, &c.

Vesceremur ut suprà in vesci, but here it is of the subjunctive mood, preterimperfect tense, plural number and first person, like *legeremur*, and agreeth with its nominative case *nos*, which is not expressed, because *nominativus primæ vel secundæ personæ*, &c.

Fructu ut suprà, but here it is of the ablative case singular, governed of *vesceremur*, because *fungor, fruor*, &c.

Ejus ut suprà in eâ, but here it is of the genitive case singular and feminine gender, governed of *fructu*, because *quum duo substantiva*, &c. Here note that *ejus* is a relative, and agreeth with its antecedent *arboris*, understood.

Nève consisteth of two words whereof *ne* is an adverb of forbidding, and *ve* is an inclinative conjunction.

Etiâ is a conjunction copulative.

Attingeremus is a verb personal active like *legeremus*. It is compounded of *ad* and *tango*, and maketh *at* for *ad* for better sound's sake, and *tango* for *tango*, because *hæc habeo, lateo*, &c. It maketh the preterperfect tense *attigi* and not *attetigi*, because *sed syllaba semper*, &c.; and the supines *attactum, attactu*, because *compositum ut simplex*, &c. It is of the subjunctive mood, preterimperfect tense, plural number and first person, and agreeth with its nominative case *nos* which is understood, because *nominativus primæ vel secundæ personæ*, &c.

Nisi is a conjunction exceptive, and serveth to a subjunctive mood: *Nâ, nisi, si, siquidem*, &c.

Vellemus is a verb personal neuter irregular: *Volo, vis, volui*, because *lo fit, ui, &c.*; *supinis caret*, because *psallo, volo, nolo, &c.* It is of the subjunctive mood, preterimperfect tense, plural number and first person, and agreeth with its nominative case *nos* which is understood, because *nominativus primæ, &c.*

Mori is a verb personal deponent of the third conjugation like *legi: Morior, moreris vel morere, mortuus sum vel fui, (moriôque mortuus) mori, moriens, mortuus, moriturus*. It is of the infinitive mood, having neither number, nor person, nor nominative case, and is governed of *vellemus*, because *quibusdam tum verbis, &c.*

Thus let every particular boy in a form practice awhile by himself upon a several piece of Latin, and it will show you plainly what he is able to do, and make that the most negligent and heedless amongst them shall know how to make perfect use of his whole grammar, though, perhaps, for all you could do to him he never heeded it before.

What I have hitherto mentioned touching the well grounding of children hath chiefly respect unto *Lilly's Grammar*, which is yet constantly made use of in most schools in England, and from which I think it not good for any master to decline, either in a private or public course of teaching, for these reasons following:

1. Because no man can be assured that either his scholars will stick to him, or that he shall continue with them, till he have perfectly trained them up by another grammar.

2. Because if children be made to change their grammars as often as they use to change their masters, (especially in a place where many schools are,) they will be like those that run from room to room in a labyrinth who know not whether they go backward or forward, nor which way to take toward the door—I mean, they may be long conversant in grammar books, and never understand the art itself.

3. Because I have known many, and those men of excellent abilities for grammar learning, who, having endeavored to proceed by an easier way than *Lilly's* is, have been quite decried by the generality of them that hold to the common grammar, and have had much ado to bear up the credit of their school, though their scholars have been found to make very good proficiency, and more than others.

4. Because when a master hath grounded a scholar never so well, if he (in hopes of an exhibition or scholarship, or other preferment to be had) be removed from him to one of our greater schools, he shall be made, *pro formâ*, to get *Lilly's Grammar* by heart, and to neglect what he hath formerly learned as unnecessary and useless.

5. Because children in their tender age are generally like leaking vessels, and no sooner do they receive any instructions of grammar but they forget them as quickly, till by frequent repetitions and examinations they be riveted into them, and by assiduity or long practice brought to a habit which can not be bred in them under two or three years' time, in which space they may be as well habituated and perfected by *Lilly's Grammar* as any other, according to the platform of teaching it which I have already showed, and by means of those helps which I have published for the better explication of some parts of it.

Yet I do not deny but a far easier way may be taken to teach children, first, the grounds and rudiments, and afterward, the whole system of grammar,

than that which is generally now in use according to Lilly, whom after I had observed many eminent schoolmasters (who have published grammars of their own) to condemn of many tautologies, defects and errors, and withal, to endeavor to retain the substance of his grammar, I essayed myself to see what might be done in that kind, with an especial eye upon the slender capacities of children with whom I had to do. And after trial was made that such instruments would forward my work, I was bold to publish first, *An Easy Entrance to the Latin Tongue*, and then *The Latin Grammar Fitted for the Use of Schools*, which how I have for sundry years taught, together with *Lilly's Grammar*, I shall now briefly declare:

1. As children are going over the *Accidents* and that part of the grammar which concerneth the genders of nouns and the preterperfect tense, and supines of verbs, I make them one day to peruse that part of the grounds of grammar which concerneth the eight parts of speech severally handled, and another day to read that which concerneth their construction, and every Saturday morning to run over their examination, which being but a task of about half an hour doth exceedingly help their understanding and memory in getting their everyday parts and keeping them in mind, especially if they be made sometimes to look upon their synopsis, and thereby to take notice how handsomely and orderly the rules hang together.

2. Likewise, as children proceed in *Lilly's Grammar*, (which commonly is but very slowly, because it being all in Latin is hard to be understood, and being somewhat long in learning, boys are apt to forget one end of it before they can come to another,) I cause them to make use of the *Latin Grammar*, which I fitted to the use of schools together with it. This I usually divide into twelve or sixteen parts, (letting the appendix alone till they understand all the rest,) in reading of which I cause them to spend half an hour for the most part every day, and by comparing what they read with that in *Lilly's Grammar*, I make them to observe how what they learn in Lilly ought rightly to be placed according to the true method of grammar art which they see analyzed in the synopsis. They may first read it over in English only, and then in Latin and English together, and afterward only in Latin. And because frequent examination is a main expedient to fasten what is taught, I cause them every Saturday morning to make use of *Examinatio Latinæ Grammaticæ*, (which is now lately printed,) and let one boy ask the questions out of the book, and the rest answer him orderly out of the grammars in their hands. And this I find, that a natural and clear method of teaching grammar is the best means that can be devised to open the understanding for the receiving, or to strengthen the memory for the retaining, of any instructions that can be given concerning it. And I judge that method to be most natural and easy which doth at once lay open the subject that it treateth of, and enlighten a mean capacity to apprehend it on a sudden; and which hath withal a power in itself, that whether the discourse upon the matter be more contracted or enlarged, it can bring all that can be said of it under a few certain and general heads by way of commonplace, which being surely kept in mind, all other documents depending on them as particulars will easily be remembered.

Thus have I freely imparted my thoughts touching the most familiar way that I have hitherto known (either by my masters, or my own practice, or any thing that I have observed by reading or converse with experienced school-

masters) of teaching the common grammar, and making use of those ordinary school-books in every form which are taught in most schools in England. And because it belongs chiefly to the usher in most of our grammar schools to teach children to understand and make use of their grammar, and by degrees to furnish them with proper words or good phrase, that they may be able of themselves to write or speak true Latin, or translate either way pretty elegantly before they come under the master, I call this part of my discovery *The Usher's Duty*, wherein he may plainly see how he ought to respect the end, the means, and the manner how to use every help or mean for the better dispatch of that which he is continually employed about, viz., the well grounding of children in grammar learning, which may be done in three years with the ordinary sort of boys, even those of the meanest capacity if discretion in every particular be used, which is beyond any directions that can be given. So that under the usher I admit of three forms: the first, of enterers; the second, of practitioners; the third, of proficient in the knowledge of grammar.

Having done therefore with grounding children, (whose inadvertency is the teacher's daily trouble, and not to mention their other infirmities, requireth that they be held long in one and the same work, and be made ever and anon to repeat again what they formerly learned,) I shall next add somewhat concerning teaching men at spare hours in private, with whom (by reason of their stronger capacities and more use of reason) a far speedier course may be taken, and greater proficiency may be made in half a year, than can be expected from children in three years' space. And what I shall here deliver is confirmed by that experiment which I have made with many young gentlemen for these eleven or twelve years together last past in London, who being very sensible of their own want of the Latin tongue, and desirous (if possible) to attain it, have thought no cost nor pains too much to be employed for gaining it, and yet in a few months they have either been so grounded as to be able to help themselves in a plain author in case they knew nothing before, or so perfected as to grapple with the most difficult and exactest authors in case they had formerly but a smattering of the language, and this they have obtained at leisure time, and at far less expense, than they now prize the jewel at which they have. In teaching a man, then, I require none of those helps which I have provided for children's use, (though perhaps he may find benefit to himself by perusing them in private,) only I desire him at the first to get an easy entrance to the Latin tongue, and by it I show him as briefly, orderly and plainly as I can,

1. How he ought to distinguish words so as to know what part of speech any word is.

2. To tell what belongeth to every several part of speech.

3. To get the examples of the declensions and conjugations very exactly so as to know what any noun or verb signifieth according to its termination, and to store him with words, I advise him to peruse a chapter in the *Vocabulary* at least once every day, and to observe the Latin names of such things as are common in use and better known to him.

4. Then I acquaint him with the most general rules of concordance and construction, and help him to understand them by sundry short examples applicable thereunto.

5. Last of all I cause him to take some of the *Collectanea*, and help him to construe, parse, imitate, and alter them until he be able to adventure upon some easy author.

After he be thus made well acquainted with the grounds of grammar, I bid him to procure the *Latin Grammar* fitted for his use as well as for schools, and together with it a *Latin Testament* or Bible, and then I cause him to read over his grammar, (by as much at once as he can well peruse in half an hour,) and be sure that he thoroughly understand it, and after every one of the four parts of grammar I give him a praxis of it, by exercising whereof he may easily know how to use his rules and where to find them.

When by this means he can tell what to do with his grammar, I turn him to the *Latin Testament*, (beginning with the first chapter of Saint John's Gospel because it is most easy,) and there I make him (by giving him some few directions which he hath, together with his grounds of grammar) learn to construe of himself six, eight, or ten verses, with the help of his English Bible, and to parse them exactly according to his grammar, and by going over three or four chapters he will be able to proceed understandingly in his *Latin Bible* without help.

Which when he can do I advise him to get *Corderius*, English and Latin, where he is chiefly to take notice of the phrases how they differ in both languages, and to imitate here and there a colloquy to try what good Latin he can write or speak himself. And now I commend to his own private reading *Dialogi Gallico Anglo-Latini*, by Dugres: *Dictionarium octo lingue*, or *The School-master*, printed formerly by Michael Sparks, and *Janua Linguarum*, or rather *Janua Latinæ linguæ*, and the like, by perusal of which, together with *Corderius*, he may be furnished with a copy of words and phrases for common discourse in Latin. Afterward I help him in reading *Æsop's Fables* to construe and parse, and imitate a period or more in any of them, thereby to acquaint himself with the artificial manner of placing words. And when I see he dare adventure upon the Latin alone, I make him read *Terence* over and over, and to observe all the difficulties of grammar that he meets in him, and after he is once master of his style he will be pretty well able for any Latin book, of which I allow him to take his choice, whether he will read *Tully*, *Pliny*, *Seneca*, or *Lipsius* for epistles; *Justin*, *Sallust*, *Lucius Florus*, or *Cæsar* for history; *Virgil*, *Ovid*, *Lucan*, or *Horace* for poetry.

And when I see he can read these understandingly, I judge him able to peruse any Latin author of himself by the help of *Cooper's Dictionary* and good commentators or scholiasts.

These authors which I have mentioned are most of them in English, as also *Livy*, *Pliny's Natural History*, *Tacitus*, and other excellent books, which he may peruse, together with the Latin, and by comparing both languages together he may become very expert in both. Yet I would advise him to translate some little books himself, first out of Latin into English, and then out of English into Latin, which will at once furnish him with all points of grammar, and the right use and ordering of words, and in a short time bring him to the like eloquence.

Mr. Ascham commendeth *Tully de senectute* and his epistles, *ad Quintum Fratrem et ad Lentulum*, for this purpose.

If he would exercise himself in oratory or poetry, I suppose his best way is to imitate the most excellent pieces of either that he finds in the best and purest authors (especially *Tully* and *Virgil*) till he can do well of himself. *Horace* and *Buchanan's Psalms* will sufficiently store him with a variety of verses.

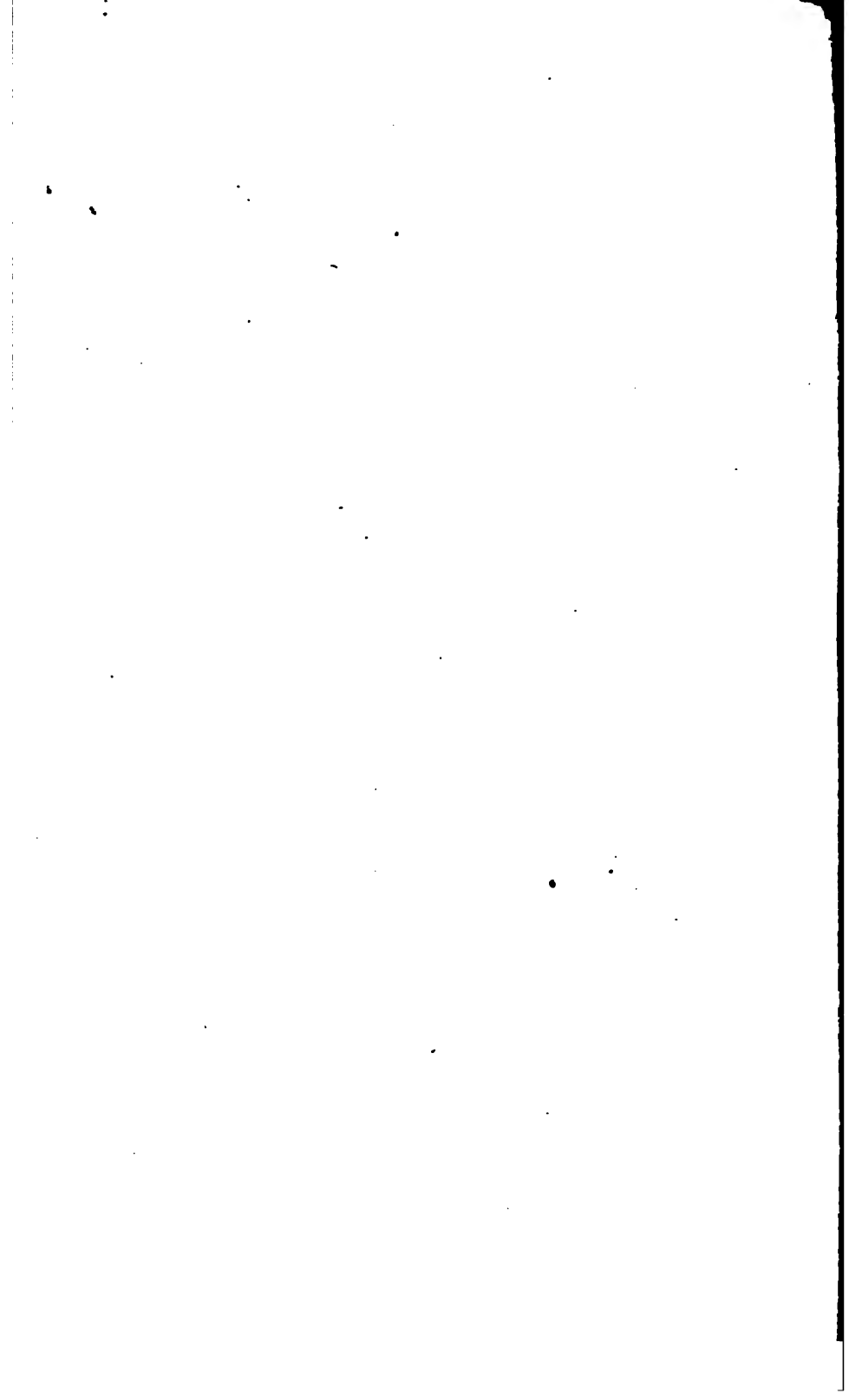
And now if one should ask me before I conclude this book and begin with

the next, whether it be not possible for men or children to learn Latin as well as English without grammar rules?

I answer, first, that it is hardly possible, because the Latin tongue is not so familiarly spoken as English, which is gotten only by hearing and imitation.

2. That it is not the better way, partly because they that are well acquainted with grammar know when they or others speak well and when they speak ill, whereas, they that are ignorant of the rules take any Latin for good, be it never so barbarous or full of solecisms; and partly because they that are skillful in grammar are able to do something in reading authors or translating, or writing epistles, or the like, by themselves, whereas, they that learn Latin without any rule are able to do nothing surely if their teacher be away. Besides, if the Latin be once well gotten by rule, it is not so apt to be forgotten as if it be learned only by rote, because the learner is at any time able to recover what he hath lost by the help of his own intellect, having the habit of grammar in his mind. Yet I conceive it is the readiest way to the gaining of this language to join assiduity of speaking and reading and writing, and especially double translating to the rules, for as the one affordeth us words and phrases, and the other directs us how to order them for a right speech, so the exercise of both will at last beget such a habit in us, that we may increase our ability to speak and understand pure Latin, though perhaps the rules of grammar be forgotten by us.

Having here done with *The Usher's Duty*, I shall (God willing) go on to discover *The Master's Method* in every particular according to what I have either practiced myself, or observed from others of my profession. And I hope this my slender discovery will excite some of greater practice and experience to commit also to public their own observations, by whom if I may be convinced that I have any where gone in an erroneous way I shall willingly retract my course, and endeavor to steer by any man's chart that I find more easy and sure to direct me. In the meantime I commit my little vessel to the waters all alone, and desire God that whatever dangers attend it, he would so protect and prosper it that it may safely arrive to the port which I chiefly aim at, viz., the honor and service of his divine majesty, and the benefitting of both church and commonwealth in the good education of children.





THE MASTER'S METHOD.*

BY CHARLES HOOLE, A. M.,

Master of Grammar School at Rotherham in 1636, and of a Private School in London in 1660.

CHAPTER I.—*How to make the Scholars of the fourth Form very perfect in the art of Grammar and elements of Rhetoric; and how to enter them upon Greek in an easy way. How to practice them (as they read Terence, and Ovid de Tristibus, and his Metamorphosis, and Janua Latinæ linguae, and Sturmius, and Textor's Epistles) in getting copy of words, and learning their derivations and differences, and in varying phrases. How to show them the right way of double translating, and writing a most pure Latin style. How to acquaint them with all sorts of English and Latin verses, and to enable them to write familiar and elegant epistles either in English or Latin, upon all occasions.*

The usher having thoroughly performed his duty, so as to lay a sure foundation by teaching grammar and lower authors, and using other helps forementioned to acquaint his scholars with the words and order of the Latin tongue, as well for speaking as writing it; the master may more cheerfully proceed to build further, and in so doing, he should be as careful to keep what is well gotten, as diligent to add thereunto. I would advise therefore that the scholars of this fourth form may,

1. Every morning read six or ten verses (as formerly) out of the Latin Testament into English, that thus they may become well acquainted with the matter and words of that most holy Book; and after they are acquainted with the Greek Testament, they may proceed with it in like manner.

2. Every Thursday morning repeat a part out of the Latin Grammar, according as it is last divided, that by that means they may constantly say it over once every quarter. And because their wits are now ripe for understanding grammar notions wherever they meet with them, I would have them every one to

* The following is a copy of the original title page:—

THE
MASTERS
METHOD,
OR THE
Exercising of Scholars
In GRAMMARS, Authors,
and Exercises; GREEK,
LATINE, and
HEBREW.
By C. H.
LONDON,
Printed by J. T. for Andrew Crook,
at the Green Dragon in Pauls
Church Yard, 1636.

provide a paper book of two quires in quarto, in the beginning whereof they should write the heads of grammar by way of common-place, as they see it in my Latin Grammar, and having noted the pages, they should again write over the same heads, (leaving a larger or less distance betwixt them, as they conceive they may find more or less matter to fill them withal) in the leaves of their book, and insert all niceties of grammar that they find either in their daily lessons or in perusing other books at spare hours, especially such as either methodically or critically treat of grammar; amongst which I commend Mr. Brinsley's *Posing of the Accidents*, the *Animadversions upon Lilly's Grammar*, *Stockwood's Disputations*, Mr. Poole's *English Accidents*, *Hermes' Anglo-Latinus*, *Phalerii Supplementa ad Grammaticam*, Mr. Bird's, Mr. Shirley's, Mr. Burley's, Mr. Hawkins', Mr. Gregory's, Mr. Hayne's, Mr. Dane's, Mr. Farnaby's, and other late printed new Grammars, (which they may read in private one after another) will afford them several observations. As for *Authores Grammaticæ Antiqui*, which are commonly printed together; *Disputatius*, *Linacer*, *Melancthon*, *Valerius*, *Alvarez*, *Rhemus*, *Sulpitius*, *Vossius*, and the like, either ancient or modern, they may take the opportunity to read them, after they come to higher forms, and pick out of them such pretty notes as they have not formerly met withal, and write them in their common-place book. And because it may seem a needless labor for every scholar to be thus employed, and it is (almost) impossible for one alone to procure so many grammars, it were to be wished that in every school of note there might be a library, wherein all the best grammars that can be gotten might be kept, and lent to those boys that are more industriously addicted to grammar art, and which intend to be scholars, that they may read them over, and refer what they like in them to its proper head. And to encourage them in so doing, the master may do well at the first to direct them, and afterwards at leisure times to cast an eye upon their books, and see what they have collected of themselves. But be sure that they keep their paper book fair, and that they write constantly in it, with a legible and even hand.

3. Thus they may have liberty to learn Rhetoric on Mondays, Tuesdays and Wednesdays, for morning parts. And to enter them in that art of fine speaking, they may make use of *Elementa Rhetorices*, lately printed by Mr. Dugard, and out of it learn the tropes and figures, according to the definitions given by *Takæus*, and afterwards more illustrated by Mr. Butler. Out of either of which books they may be helped with store of examples to explain the definitions, so as they may know any trope or figure that they meet with in their own authors. When they have thoroughly learnt that little book, they may make a synopsis of it, whereby to see its order, and how every thing hangs together, and then write the common-place heads in a paper book (as I have mentioned before touching Grammar) unto which they may refer whatever they like in the late *English Rhetoric*, Mr. Farnaby's *Index Rhetoricus*, *Eusembrotus*, Mr. Horne's *Compendium Rhetorices*, or the like, till they be better able to peruse other authors that more fully treat of the art, as, *Vossius' Partitiones Oratorie*, *Orator ex tempore*, *Tesmarii exercitationes Rhetoricæ*, *Nic. Caussin*, *Paiot de eloquentiâ*, and many others; with which a school library should be very well furnished for the scholars to make use on, according as they increase in ability of learning.

These *Elementa Rhetorices*, in their first going over, should be explained by

the master, and construed by the scholars, and every example compared with its definition. And the scholars should now be diligent of themselves to observe every trope and figure that occur in their present authors, and when they say, to render it with its full definition, and if any be more eminent and worthy of observation than others, to write it down in their common-place book, and by this means they will come to the perfect understanding of them in a quarter of a year's time, and with more ease commit it all to memory by constant parts, saying a whole chapter together at once; which afterwards they may keep by constant repetitions, as they do their grammar.

4. When they have passed their Rhetoric, you may let them bestow those hours, which they spent about it, in getting the Greek Grammar for morning parts. And because in learning this language, as well as the Latin, we are to proceed by one rule, which is most common and certain, I prefer *Cumden's Greek Grammar* before any that I have yet seen, (though perhaps it be not so facile or so complete as some later printed, especially those that are set out by my worthy friends, Mr. Busbie of Westminster, and Mr. Dugard of Merchant Tailors' School) in the first going over of which, I would have them to repeat only the Greek letters, and their divisions, the accents, and eight parts of speech, the articles, declensions, and conjugations, the adverbs, conjunctions, and prepositions by several parts, as they are best able to get them, and to write down as much as they can say at once in a fair paper book, very exactly observing and marking every accent and note of distinction. And this will quickly enable them to write or read Greek very truly, especially if they mind the abbreviated characters, which are now lately printed at the end of most of these grammars. This work will take up about a quarter of a year's time.

In the next half year they may get over the whole grammar in that order, as it is printed. And in the interim thereof, they may make use of their Greek Testament every morning after prayers, in like manner as they formerly used their Latin one. They may begin with the Gospel of St. John, which at the first you may help them to construe and parse verbatim, but after a while when they have gathered strength to do somewhat of themselves, you may let them make use of *Pasor's Lexicon*, which they will better do by help of the *Themes*, which I caused to be printed in the margin of the Greek Testament, which will lead them to *Pasor*, to see the analysis of any word in the Testament. Mr. Dugard hath lately completed his *Lexicon Græci Testamenti Alphabeticum, unâ cum explicatione Grammaticâ vocum singularum, in usum Tironum; nec non concordantia singulis vocibus apposita, in usum Theologiæ candidatorum*; which, were it once committed to the press, as it now lieth ready in his hand, would be a most excellent help to young scholars to proceed in the Greek Testament of themselves, in an understanding and grammatical way. And I hope it will not be long ere he publish it for common use. When they have gone over the declensions and conjugations, and are able to write Greek in a very fair and legible character, let them write out the paradigmes of every declension and conjugation, and divide the movable part of the words from the terminations, as you may see it done in Mr. Dugard's *Rudimenta Grammaticæ Græcæ*. After they are thus acquainted with every particular example, they may write out all the declensions one by another, and the three voices of the verbs throughout all moods and tenses in all conjugations, that so they may more readily compare

them one by another, and see what tenses are alike or which are wanting in every voice. If these things were drawn into tables, to be hung up in the school, they would help the weaker boys.

And to supply them with store of nouns and verbs, you may let them repeat as many nouns as they can well get at once, out of Mr. Gregorie's *Nomenclatura*; and afterwards as many sentences as they can well say at once, out of *Seidelius*, or the latter end of *Clavis Græcæ linguæ*, by the repeating, construing and parsing, whereof they will learn all the primitive words of the Greek tongue, and be able to decline them. And thus they will be very well fitted to fall upon any approved Greek author, when they come into the next form. But if you would have them learn to speak Greek, let them make use of *Posselius' Dialogues*, or Mr. Shirley's *Introductorium*, in English, Latin and Greek. I commonly appointed Tuesday and Thursday afternoons for this employment, before or after my scholars had performed their other tasks.

5. *Terence*, of all the school authors that we read, doth deservedly challenge the first place, not only because *Tully* himself hath seemed to derive his eloquence from him, and many noble Romans are reported to have assisted him in making his Comedies; but also because that book is the very quintessence of familiar Latin, and very apt to express the most of our Anglicisms withal. The matter of it is full of morality, and the several actors therein most lively, seem to personate the behavior and properties of sundry of the like sort of people, even in this age of ours. I would have the scholars therefore of this form to read him so thoroughly as to make him wholly their own. To help them in so doing, I have rendered a good part of it into English, answerable to the Latin line by line, in the adverse page, and I intend (God willing) ere long to complete the whole, according to what I have formerly undertaken and promised.

This author I would have the scholars to read constantly every Monday, Tuesday, Wednesday and Thursday, for forenoon lessons, taking about half a page at once, till they begin to relish him, and then they will easily take more, and delight to be exercised in him in this manner.

1. Let them write out every lesson very fair and exactly, as they see it printed before them both in English and Latin. And this will be a means to perfect them in orthography, and to imprint what they learn in that author in their minds. They should have a quarto paper book for this purpose, wherein nothing else should be written.

2. Let them translate about four or six lines grammatically in a loose paper, that by this means they may better take notice of the way of construing.

3. Let them construe the whole lesson, both grammatically and according to the phrase, and this will acquaint them with the proprieties of both tongues.

4. Let them parse it according to the grammatical order, examining every word to the utmost of what grammar teacheth concerning it, and this will make them thoroughly to understand *Lillie*, and sometimes to consult other grammars, where he comes short in a rule.

5. Let them cull out the most significant words and phrases, and write them in a pocket-book, with figures referring where to find them in their author; and let them ever and anon be conning these by heart, because these (of all others) will stand them in most stead for speaking Latin, or writing colloquies and epistles.

In reading this book, it is not amiss for the master to remind his scholars of

the true decorum of both things and words, and how fitting they are for such persons to do or speak as are there represented, and upon such occasions as they did and spake them. As in *Andria*, they may observe not only in general, how apt young men are to be enticed, old men to chide, servants to deceive, &c., but more particularly they may see how some men are more apt to be carried away by passion than others are, and how different their natures are sometimes, though their age and breeding may be the same. Thus they shall find Simo and Chremes, two old citizens, the one pettish and apt to overshoot himself in many things, the other more calm and circumspect, and therefore better able to pacify and advise others. Likewise they shall meet with two young gentlemen, Pamphilus and Charinus, the one whereof, being very towardly and hopeful, was drawn away by ill company, and thereby brought into much trouble of mind, betwixt a fear to offend his father and a care to make amends for his fault committed; but the other being rash and childishly disposed, is set upon what he desireth with such eagerness that he will have it, though it be impossible for him to obtain it, and he be utterly ignorant of using any means to come by it. But above all, they will laugh at the knave Davus, to read how he, presuming upon his own cunning wit, displeaseth Simo and ensnareth Pamphilus, and at last brings himself within the compass of the lash. And in this and other comedies, they may observe many remarkable sayings and actions, which will hint much to abundant matter of invention for future exercises. As when they hear Davus cry, *Hem astutias!* Fie upon craft! they may take an occasion to enlarge upon the matter, as to say: "One may quickly perceive, by Davus in *Terence*, what a mischievous wit will come to, that doth always busy itself to circumvent and entrap others; for this fellow, after he had cozened his old master, and unhappily taught his master's son to tell his father a lie, and entangle himself in a double marriage, and saw his knavery could not help him to escape his own danger, was ready at last to hang himself; and though he came off pretty well with his young master, by condemning himself and asking forgiveness, and promising to amend the matter he had utterly spoiled; yet in the height of his jollity, the old man catcheth him unawares, and without hearing him speak a word for himself, calleth for Dromo, and makes him hoist him up, and carry him away to the house of correction, and there to tie him neck and heels together, and whip him smartly for the roguery he had done." Such dictates as these the master may give his scholars sometimes to turn into pure Latin, till they be able to make the like of themselves. And this is indeed to make a true use of this excellent author, according to what Erasmus directs in his golden little book, *De Ratione instituendi Discipulos*, which is worth one's perusal that is exercised in teaching youth.

When you meet with an act or scene that is full of affection and action, you may cause some of your scholars, after they have learned it, to act it, first in private amongst themselves, and afterwards in the open school before their fellows; and herein you must have a main care of their pronunciation, and acting every gesture to the very life. This acting of a piece of a comedy or a colloquy sometimes, will be an excellent means to prepare them to pronounce orations with grace, and I have found it an especial remedy to expel that rustic bashfulness and irresistible timorousness which some children are naturally possessed withal, and which is apt in riper years to drown many good parts in men of singular endowments.

6. Their afternoon parts, on Mondays and Wednesdays, may be in *Janua Latinæ Linguae*, which book should be often read over, because it will at once furnish them with the knowledge of words and things, into the reasons of which they will now be more industriously inquisitive than formerly; because their present years teach them to be more discursive in their understanding, as growing more towards men. And therefore in this book they should not only first mind the signification and grammatical construction of words, but secondly, endeavor to gain a copy of good and proper words for expression of one and the same thing, so that they may not only tell you that *domus* but also *oedus* is Latin for a house, and that *decor* and *pulchritudo* are Latin for beauty as well as *forma*; and in finding such synonyms as these, they may be helped as well by dictionaries as by frequent reading. Thirdly, they may with every part bring a piece of the index translated into English. Fourthly, because they must now begin to use their judgment in the right choice of words, (when they find many heaped together) it were not amiss to let them inquire the original out of Rider's *Latin Dictionary*, or Beckman's *de Originibus Latinæ linguae*; and to consider the differences that are betwixt words of the same signification; which they may learn out of *Ausonius Popma*, *Laurentius Valla*, *Cornelius Fronto*, *Varro de linguâ Latinâ*, and the like books fit to be kept in the school library.

7. On Tuesdays and Thursdays, in the afternoon, I would have this form employed in some of Tully's *Epistles*, (either those collected formerly by Sturmius, or those of late made use of in Westminster School); but Sturmius's I rather prefer as more easy to begin withal; the others may be used afterwards, together with Textor's *Epistles*. And

1. I would have them be exercised in double translating these *Epistles*, so as to render many of them into good English, and after a while to turn the same again into Latin, and to try how near they can come to their author in the right choice and orderly placing of words in every distinct period. And because the author's style and expression will in many particulars seem hard to those that have not formerly read some of his *Epistles*, I have thought good at first to give my scholars a taste of an epistolary style, by translating *A Century of Select Epistles*, out of Tully and other choice authors, making the English answer to the Latin, period by period. And these I cause them to write over, and in so doing, to take notice of the placing of every word, and its manner of signification. By this means they both better themselves in orthography, and easily become so acquainted with Tully's expressions, that they can adventure to construe any of his epistles of themselves, and turn them into English, as they see I have done the like before them.

2. Then do I cause them (as I said) to make double translations of themselves; one while writing down both the English and Latin together, as they construe it, (which some call *metaphrasis*, an example or two whereof you may see in Merchant Tailors' School *Probation*) and another while, and most frequently, writing the English out of the Latin by itself, which, within ten days after, they try how to turn into the like good Latin again. And this is the way that Mr. Brinsley so much commendeth, and Mr. Ascham was moved to think to be only or chiefly the fittest for the speedy and perfect attaining of any tongue.

3. After they are grown pretty quick in translating both ways, you may write them down a little English epistle of like matter and words to that in

their book, directed to some of their own acquaintance, which they may turn into Latin, period after period, by themselves. To begin therefore with the first Epistle in *Sturmius*, which may be written down, translated thus:—

M. T. C. Terentia, Salutem plurimam dicit.

Mark Tully Cicero sendeth hearty commendations (to his wife) *Terentia*.

Si vales, bene est, ego valeo.

If you be in good health, it is well: I am in good health.

Nos quotidie tabellarios vestros expectamus, qui si venerint, forlasse erimus certiores, quid nobis faciendum sit, faciemusque te statim certiores.

We every day expect your letter-posts; when, if they come, we shall be perhaps more certain what we are to do, and we will certify you forthwith.

Valeudinem tuam cura diligenter, vale.

Look diligently to your health, farewell.

Calendis Septembris.

The first day of September.

And you may show them how to imitate it, (observing our English manner of writing letters) thus:

To his very loving friend Mr. Stephen Primato, at the Seven Stars, near Newgate, London, these.

Amantissimo suo amico Domino Stephano Primato ad insigne Septentrionum juxta novam portam Londinensem, hasce dabis.

Most sweet Stephen:—

If you be all in good health at London, it is very well; we are all very well at Barnet: the Lord God be praised.

Stephane mellitissime:—

Si vos omnes Londini valetis, optimè est; nos quidem omnes Barneta valemus: Laudetur Dominus Deus.

I have every day expected a letter from you, for this whole week together, which, if it come, is like to be very welcome to me; I pray you therefore write to me and let me know what you do, and I will write back again to you forthwith.

Ego quotidie literas tuas, per hanc totam hebdomadam expectavi; quæ si venerint gratissimæ mihi futuræ sunt; oro igitur ut ad me scribas, et certiores me facias, quid agis, et ego statim ad te rescribam.

Give your mind diligently to learning. Farewell heartily.

Studio literarum diligenter incumbe. Vale feliciter

Your most loving friend

ROBERT BURROWS.

Amantissimus tuus amicus

ROBERTUS BURROWES.

Barneta, Octob. 4, 1659.

They may imitate the same epistle again in framing an answer to the particulars of the foregoing letter after this manner, observing the form of composition rather than the words.

To his very much respected friend Mr. Robert Burrows, near the Mitre at Barnet, these deliver.

Observantissimo suo amico Roberto Burrowes, haud ita procul à Mitrà Barneta, hasce dabis.

Dear Robert:—

I am very glad I am certified by your letter that you and all our friends are in good health. Lo, I have now at last sent you my letter, which I am sorry

that I have made you so long to look for before it came to your hand. And forasmuch as you desire to know what I do, I thought good to certify you that I am wholly busied at my book, insomuch as I could willingly find in my heart to die at my studies: so true is that which we sometimes learned in our *Accidents*—To know much is the most pleasant and sweetest life of all. You need not, therefore, persuade me further to give my mind to learning, which (truly to speak plainly) I had much rather have than all, even the most precious jewels in the world. Farewell, and write as often as you can to

Your very loving friend,

STEPHEN PRIMATE.

Charissime Roberte :—

Quodd ex tuis lileris certior fiam, te, et omnes nostros bene valere, magnopere gaudeo. Ecce, nostras, jam tandem ad te misi. Quas, quoniam in causâ fui, ut diutius expectes, priusquam ad vos venerint, vehementer doleo. Cùm autem quid ego agam, scire cupias; certiozem te facere velim, me totum in libris esse occupatum; usque adeo, ut vel emori studiis mihi dulce erit: Ita verum est, quod è Rudimentis Grammatices olim ebibimus; Multum scire est vita jucundissima. Non igitur opus est, ut ulterius mihi suadeas, studio literarum et doctrinæ incumbere, quæ quidem (ut planè loquar) omnibus gemmis, vel pretiosissimis cupidissime malim. Vale, et literas quàm oepissime mitte ad

Amantissimum tui,

ROBERTUM BURROWS.

Thus you may help them to take so much as is needful and fit for their purpose out of any Epistle, and to alter and apply it fitly to their several occasions of writing to their friends; and where Tully's expressions will not serve them, let them borrow words and phrases out of the books that they have learned, (but especially out of *Terence*) and take care to place them so that they may continually seem to imitate Tully's form in writing epistles, though they be not altogether tied to his very words. And this I give as a caution both in speaking and writing Latin, that they never utter or write any words or phrases which they are not sure they have read or heard used in the same sense that they there intend them.

It were necessary for them, as they proceed in reading epistles, to pick out all such familiar expressions as are incident to be used in writing letters, and to note them in a paper book kept for the purpose, digested into certain places, that they may help themselves with them as they have occasion; you may see a precedent hereof in *Fabritius's Elegantiæ Pueriles*. And because the same phrase is not often to be repeated in the same words, they should now strive to get more liberty of expressing their minds by learning to vary one and the same phrase both in English and Latin, sometimes *ex tempore*, before the master, and sometimes amongst themselves by writing them down, and then appealing to the master to judge who hath done the best. To enter them upon this work, you may first begin with Mr. Clark's *Duxoratorius*, and then make use of that excellent book of Erasmus *de copiâ verborum*, which was purposely by him intended and contrived for the benefit of Paul's School, and I am sorry to see it so little made use of in most of our grammar schools in England.

To encourage them to begin to write of themselves, and to help their invention somewhat for inditing epistles, you may take this course at once with a whole form together, which I have experienced to be very easy, and generally pleasing to young scholars.

1. Ask one of your boys, to whom and for what he is minded to write a let-

ter; and, according as he shall return you an answer, give him some general instructions how to do it.

2. Then bid him and all his fellows let you see which of them can best indite an English letter upon that occasion, and in how short a time.

3. Let them every one bring his own letter fairly written, that you may show them how to amend the imperfections you find in it.

4. Take his that hath done the best, and let every one give you an expression of his own gathering for every word and phrase that is in it, and let it be different (if it may be) from that which another hath given already before him.

5. As they give in their expressions, do you, or an able scholar for you, write them all down in a paper, making a note that directeth to the place to which they belong.

6. Then deliver them the paper, and let every one take such words or phrase as is most agreeable to the composition of an epistolary style (so that he take not the same that another useth) and bring the letter written fairly, and turned out of English into Latin. And thus you shall find the same epistle varied so many several ways, that every boy will seem to have an epistle of his own, and quite differing in words from all those of his fellows, though the matter be one and the same.

To help the young beginners to avoid barbarisms and Anglicisms, (to which they will be very subject, if not timely prevented) you may make use of a little English and Latin Dictionary in octavo, which resolves the difficulties of translating either way, and Mr. Walker's useful *Book of Particles*, which is lately printed; as also Mr. Willis' *Anglicisms Latinized*, and Mr. Clerk's *Phraseologia Puerilis*; not to mention *Turselinus*, or Dr. Hawkins' *Particulæ Latinæ Orationis*, which may be afterwards made use of, when scholars grow towards more perfection in the Latin tongue, and can read them without your help. But for their further assistance in this most profitable and commendable kind of exercise, I commend unto you Mr. Clerk's *Epistolographia*, and Erasmus' *De conscribendis Epistolis*; to which you may add *Buchleri Thesaurus conscribendarum Epistolarum*, *Verepæus de conscribendis Epistolis*, and others fitting to be reserved in the school library for your scholars to peruse and collect notes out of, at their leisure hours. He that will be excellent in any art must not only content himself with the best precedents, which in many particulars may (perhaps) exceed all others, but also now and then take notice what others have attempted in that kind, and sometimes he shall find the meanest to afford him matter of good use. And therefore I would advise that the scholars in the upper forms may often employ themselves in perusal of all *Tully's Epistles*, and sometimes in those of Pliny, Seneca, Erasmus, Lipsius, Manutius, Ascham, Politianus, and whatever they find in the school library, (which should indeed be very well furnished with epistolary books) that out of them they may learn to express their minds to the full upon any subject or occasion, to whomsoever they write, and to use a style befitting both the matter and persons, be they never so lofty or mean.

After this form is once well entered to write epistles of themselves, they may make two epistles every week, (one in answer to the other) to be shown fairly on Saturdays, so they do not exceed a quarter of a sheet on one side, because great heed should be taken in the composing of them.

And let this rule be observed in performing these and all manner of exercises, that they never go about a new one till they have finished what they began. It

were better for scholars sometimes to do one and the same exercise twice or thrice over again, that in it they may see and correct their own errors and strive to outdo themselves, than by flipping from one work to another, and leaving that in their hands incomplete, to get an ill habit of posting over business to little or no purpose. *Non quàm multùm sed quàm bene*, should be remembered in scholars' exercises.

8. Their afternoon lessons on Mondays and Wednesdays, for the first half year (at least) may be in Ovid's little book *De tristibus*, wherein they may proceed by six or eight verses at a lesson, which they should first repeat *memoriter* as perfectly as they can possibly, because the very repetition of the verses, and much more the having of them by heart, will imprint a lively pattern of hexameters and pentameters in their minds and furnish them with many good authorities.

2. Let them construe *verbatim*, and if their lesson be harder than ordinary, let them write it down construed.

3. Let them parse every word most accurately, according to the grammatical order.

4. Let them tell you what tropes and figures they find in it, and give you their definitions.

5. Let them scan every verse, and after they have told you what feet it hath in it, and of what syllables they consist, let them give the rule of the quantity of each syllable, why it is long or short; the scanning and proving verses, being the main end of reading this author, should more than any thing be insisted upon, whilst they read it. And now it will be requisite to try what inclination your young scholars have towards poetry: you may therefore let them learn to compose English verses, and to inure them so to do, you should

1. Let them procure some pretty delightful and honest English poems, by perusal whereof they may become acquainted with the harmony of English poesy. M. Hardwick's late translation of *Mantuan*, Mr. Sandys of *Ovid*, Mr. Oglesby's of *Virgil*, will abundantly supply them with heroic verses, after they can truly and readily make which, they may converse with others that take liberty to sport it in lyric verses; amongst all which, Mr. Herbert's Poems are most worthy to be mentioned in the first place, and next to them (I conceive) Mr. Quarles' *Divine Poems*, and his *Divine Fancies*; besides which, you may allow many others full of wit and elegance; but be sure you admit of none which are stuffed with drollery or ribaldry, which are more fit to be burnt than to be sent abroad to corrupt good manners in youth.

2. After they are thus become acquainted with a variety of meter, you may cause them to turn a fable of *Æsop* into what kind of verse you please to appoint them; and sometimes you may let them translate some select epigrams out of *Owen*, or those collected by Mr. Farnaby, or some emblems out of *Alciat*, or the like flourishes of wit, which you think will more delight them and help their fancies. And when you see that they begin to exercise their own wits for enlargement and invention, you may leave them to themselves to make verses upon any occasion or subject; yet to furnish them with rhymes, epithets, and variety of elegant expressions, you may let them make use of the pleasant *English Parnassus*, composed by the true lover of the muses, Mr. Joshua Poole, my quondam school-fellow at Wakefield, who, like another *Daphnis*, may truly be said (what I now sigh to write) to have been at the blue house in Hadley Parish, now daily in my sight, *Formosi pecoris custos, formosior ipse*.

When you have taught them truly to scan and prove any kind of Latin verse, and made them to taste the sweetness of poetizing in English, you may prepare them further for making Latin verses out of their present authors, thus:

1. Take a distich or two which they know not where to find, and transpose the words as different as may be from a verse, and when you have made one to construe them, dismiss them all to their seats, to try who can turn them first into true verses without one another's suggesting. When they have all dispatched, cause him whom you conceive to be the weakest to compare what he hath done with his author, and to prove his verses by the rules of *Prosodia*.

2. You may sometimes set them to vary one and the same verse, by transposing the same words as many several ways as they can. Thus this verse may be turned one hundred and four ways:

Est mea spes Christus solus qui de cruce pendet,

And sometimes you may cause them to keep the same sense, and alter the words. Thus this distich is found in Mr. Stockwood's *Progymnasma Scholasticum*, to be varied four hundred and fifty ways:

Linque cupido jecur, cordi quoque parclo, si vis Figere; fige alio, tela cruenta loco.

To direct and encourage your young scholars in turning verses, you may make use of the book last mentioned, and for further instructions concerning making verses, I refer you to Mr. Clerk's *Dux Poeticus*.

9. To enable your scholars yet more to write good Latin in prose, and to prepare them further for verses by reading poetical books which abound with rich expressions of fancy, I would have them spend the next half year in *Ovid's Metamorphosis*, out of which author you may make choice of the most pleasing and profitable arguments, which it is best for you yourself to construe and explain unto them, that they may dispatch the more at a lesson, and with more ease. When they come to say,

1. Let them repeat four or six verses (which you judge most worthy to be committed to memory) by heart.

2. Let them construe the whole lesson *verbatim*, minding the propriety of the words, and the elegance of every phrase.

3. Let them parse every word grammatically, as they have been used to do in other authors.

4. Let them give you the tropes and figures, the derivations and differences of some words, and relate such histories as the proper names will hint at, which they may peruse beforehand in their dictionary. And let them not forget to scan and prove every verse, and to note more difficult quantities of some syllables.

5. Let them strive (who can best) to turn the fable into English prose, and to adorn and amplify it with fit epithets, choice phrases, acute sentences, witty apothegms, lively similitudes, pat examples, and proverbial speeches, all agreeing to the matter of morality therein couched; all which they should divide into several periods and turn into proper Latin, rightly placed according to the rules of rhetorical composition.

6. Let them exercise their wits a little in trying who can turn the same into the greatest variety of English verses.

Mr. Sandy's translation of this book, in folio, and Mr. Rosse's *English Mythologist*, will be very delightful helps to your scholars for the better under-

standing thereof; and if to these you add Sir Francis Bacon's little book *De Sapientiâ veterum*, Natales' *comes*, and Verderius's *Imagines Deorum*, *Lexicon Geographicum*, *Poeticum*, et *Historicum*, and the like, fitting to be reserved for your scholars' use in the school library, it will invite them like so many bees to busy themselves sucking up matter and words to quicken their invention and expression; and if you would have those in this form acquainted with variety of Latin verses, and how to change them one into another, you may sometimes exercise them in Buchanan's *Psalms*, and partly out of Vossius's, partly out of Mr. Lloyd's *Grammar* lately printed, you shall find sufficient store and several kinds of verses to delight and profit them withal.

Whereas *Wits' Commonwealth* is generally imposed upon young scholars to translate out of English into Latin, and I observe it very difficult to be done by reason of the many uncouth words and mere Anglicisms that are in it, concerning which they can not any way help themselves by common dictionaries or phrase-books, I have thought good to frame an alphabetical index of every English word and phrase therein contained, with figures pointing to the chapter and verse where it is used, and showing what Latin or Greek expression is most proper to be made in that place.

And this I would have annexed to that useful book, that by help thereof the scholars may of themselves be able to translate those pretty sentences out of English into Latin orderly composed, and afterwards with the same ease out of Latin into Greek. If the stationers do not accord, that they may be printed together, know that the Index may be had single by itself, as well as the book, and he that buyeth the one can not well be without the other; they are both so necessary and nearly related to one another.

They in this form may learn the Assembly's lesser Catechism in Latin and Greek, which is elegantly translated into those languages by Doctor Harmar.

Thus then in short, I would have them employed: 1. In reading out of the *Latin Testament* every morning, till they be able to go on with the *Greek*, which may then take place. 2. In repeating a grammar part every Thursday morning. 3. In learning rhetoric when they have done that. 4. *Camden's Greek Grammar* on Mondays, Tuesdays and Wednesdays for morning parts. 5. In using *Terence* on Mondays, Tuesdays, Wednesdays and Thursdays for forenoon lessons. 6. In *Janua Latinæ Linguae* for afternoon parts on Mondays and Wednesdays. 7. In some of Sturmius' or Textor's *Epistles* on Tuesday and Thursday afternoons, and *Shirley's Introductorium* after *Praxis* ended. 8. In *Ovid de Tristibus* on Mondays and Wednesdays in the afternoon for the first, and in *Ovid's Metamorphosis* for the second half year. They may translate four verses every night out of *Wits' Commonwealth*, and say lessons on Saturdays in the *Assembly's Catechism*; and by the diligent improvement of these books to their several uses, they may first become perfectly ready in the Latin and Greek grammar, and the elements of rhetoric. 2. They may get copy of words and learn to know their derivations and differences, as also how to vary phrases. 3. They may gain the right way of double translating and writing a pure Latin style. 4. They may be helped in their invention and easily taught to make all sorts of English and Latin verses, and to write familiar and elegant epistles upon all occasions; for the performance of all which works, though more than ordinary care and pains may seem to be required in the master, and a great deal of study and diligence may be thought to be exacted of the scholars

above what is usual in many schools, yet a little experience will evidence that all things being orderly and seasonably done, will become easy and pleasing to both after a very little while. And if the master do but consider with himself and inform his scholars that they shall all ere long reap the sweet of their present labors, by a delightful and profitable perusal of the choicest authors, both Greek and Latin, whom as they must strive to imitate, so they may hope to equal in the most noble style and lofty strains of oratory and poesy; it will encourage them to proceed so cheerfully that they will not be sensible of any toil or difficulty, whilst in a profiting way they pass this form and endeavor to come to the next, which we intend to treat of in the following chapter.

II.—*How to teach scholars in the fifth Form to keep and improve the Latin and Greek Grammars, and Rhetoric. How to acquaint them with an Oratory, style and pronunciation. How to help them translate Latin into Greek, and to make Greek verses, as they read Isocrates and Theognis. How they may profit well in reading Virgil, and easily learn to make good themes and elegant verses with delight and certainty. And what Catechisms they may learn in Greek.*

Though it may seem a needless labor to prescribe directions for the teaching of the two upper forms, partly because I find more written concerning them than the rest, and partly because many very eminent and able schoolmasters employ most of their pains in perfecting them, every one making use of such authors and such a method as in his own discretion he judgeth best to make them scholars; not to say that the scholars themselves, (being now well acquainted with the Latin and Greek Grammar, and having gotten a good understanding (at least) of the Latin tongue, by the frequent exercise of translating and speaking Latin, and writing colloquies, epistles, historical and fabulous narratives and the like, besides reading some school authors and other helpful and profitable books, will be able in many things to proceed without a guide, addicting their minds chiefly to those studies which their natural genius doth most prompt them to, either concerning oratory or poetry; yet I think it requisite for me to go on as I have begun, and to show what course I have constantly kept with these two forms, to make them exactly complete in the Greek and Latin tongues, and as perfect orators and poets in both as their young years and capacities will suffer; and to enter them so in the Hebrew as that they may be able to proceed of themselves in that holy language, whether they go to the university, or are otherwise disposed to some necessary calling, which their parents or friends think fitting for them.

And first, I most heartily entreat those (especially that are my loving friends and acquaintance) of my profession, whose years and experience are far beyond mine, that they would candidly peruse and kindly interpret what I have written, seeing I desire not by any means to impose any thing too magisterially upon them or others, but freely to communicate to all men what I have for many years kept private to myself, and hath by some (whose single judgment may sufficiently satisfy me) been importunately thus given to the press; and if in any particular I seem to them to deviate from or fall short of what I aim at, viz., a facilitating the good old way of teaching by grammar, authors, and exercises, I shall take it as a singular token of love that they acquaint me with it, and if by this rush-candle of mine they please to set up their own tapers, I shall rejoice to receive greater light by them, and be ready to walk in it more vigor-

ously. In the interim I go on with my discovery touching the fifth form, which I would have employed in this manner:

1. Let them and the form above them read daily a dozen verses out of the *Greek Testament* before the saying of parts.

2. Let them reserve the *Latin* and *Greek Grammars* and *Elementa Rhetorices* for weekly parts, to be said only on Thursday mornings, and so divided that they may be sure to go over them all once every quarter. By this means they will keep them in constant memory, and have more time allotted them for perusing authors and dispatch of exercises. You must not forget at every part to let them have your help of explication of the most obscure and difficult places before they recite, and after they have recited to make such diligent examination as that you may be sure they understand what they learn.

And to make them more fully acquainted with the accents and dialects of the Greek tongue, you may (besides those few rules in their grammar) let them daily peruse a chapter in Mr. Franklin's little book *De Ophorovias*, which is excellently helpful to young Græcians, and when they grow stronger, that *Appendix de Dialectis* at the end of *Scapula* will be worth their reading and observing. It would be good sometimes to make them compare the *Latin* and *Greek Grammar* together, and to see whetein they agree and wherein they differ, but especially in the rules of syntax, and for this purpose *Vechneri Helloxia* will be of excellent use.

And as I have directed before how scholars should have a commonplace-book for the Latin grammar, so I do here also for the Greek desire that after it is learnt, it may be drawn into a synopsis, and that digested into commonplace heads, to which they may easily refer whatever they read worth noting out of any Greek grammar they peruse. And that they may more freely expatiate in such books, it were good if they had Mr. Busby's *Grammar*, *Oleonard*, *Scotus*, *Chrysolora*, *Ceporinus*, *Gaza*, *Urbanus*, *Caninius*, *Gretserus*, *Possellii Syntaxis*, and as many as can be gotten, both ancient and modern, laid up in the school library, to collect annotations out of, as their leisure will best permit; and you will scarce imagine to what exactness a boy will attain, and what a treasure of good notes he will have heaped up in these two years' time, if he be moderately industrious, and now and then employ himself in collecting of his own accord; and I may add that scholars of any ordinary ingenuity will delight more to be doing something at their book, which they well understand, than to be trifling and rambling up and down about idle occasions.

3. Forasmuch as it is usual and commendable to bring on children towards perfection in the Greek tongue, as they proceed in oratory and poetry in the Latin, I think it not amiss to exercise these two forms in such authors as are commonly received and may prove most advantageous to them in all these; yet herein I may seem to differ from some others, that instead of grammar parts, (which I reserve to be constantly repeated every Thursday) I would have this form to learn some lively patterns of oratory, by the frequent and familiar use whereof, and the knowledge of the histories themselves to which they relate, they may at last obtain the art of gallant expression, and some skill to manage future affairs, it being requisite for a scholar, more than any man, to be expert in speaking and doing.

At first therefore for morning parts on Mondays, Tuesdays and Wednesdays, I would have them exercised in *Apithonius*, (if it can be gotten, as I desire it

may be reprinted) both in Greek and Latin. Out of which book I would have them translate the fables and themes (so as to finish at least one every week) into pure English, and to repeat them (being translated) in both languages, that by that means they may gain the method of these kinds of exercises and inure themselves to pronunciation. When they have gone over them, they may next translate *Tully's* six Paradoxes, and pronounce them also in English and Latin, as if they were their own. And afterwards they may proceed in those pithy orations which are purposely collected out of *Sallust, Livy, Tacitus, and Quintus Curtius*, having the histories of their occasions summarily set down before them. And of these I would have them constantly to translate one every day into English, beginning with those that are the shortest, and once a week to strive amongst themselves who can best pronounce them both in English and Latin. I know not what others may think of this task, but I have experienced it to be a most effectual mean to draw on my scholars to emulate one another who could make the best exercises of their own in the most rhetorical style, and have often seen the most bashful and least promising boys outstrip their fellows in pronouncing with a courage and comely gesture; and for bringing up this use first in my school, I must here thank that modest and ingenious gentleman, Mr. Edward Perkins, who was then my usher, for advising me to set upon it. For I found nothing that I did formerly to put such a spirit into my scholars and make them, like so many nightingales, to contend who could *μελίσσεν* most melodiously tune his voice and frame a style, to pronounce and imitate the forementioned orations.

4. Their forenoon lessons on Mondays and Wednesdays may be in *Isocrates*, and to make them more attend the Greek,

1. Let them (at first especially) translate every lesson by way of interlineary writing according to the grammatical order.

2. Let them parse the whole lesson in that order, and give you the variation and derivation of the most difficult nouns and verbs throughout, and the rules of syntax and of the accents.

3. Let them pick out the phrases and more elegant words as they go along, and write them in a paper book, and transcribe what sentences they meet withal into their commonplace-book. After they are well entered, you may cause them to translate the Greek into elegant Latin, and on Fridays, when they come to repeat, to render their own Latin into Greek, which they should endeavor to write down very true and fair without any help of their author, who is then to be thrown aside, but afterwards compared with what they have done.

Three quarters of a year (I conceive) will be sufficient to exercise them in *Isocrates*, till they get a perfect knowledge of etymology and syntax in Greek, which they will more easily attain to, if out of this author (especially) you teach them to translate such examples most frequently as may serve to explicate those rules which are not to be found in their Latin grammar, and very seldom occur in the Greek one, which they commonly read. And then you may let them translate a psalm out of English into Latin, and out of Latin into Greek, and compare them with the Septuagint Psalter. Afterwards you may give them some of Demosthenes' *Sentences* or similes, (collected by Ioinus), or of Posselius' *Apothegms* in Latin only; and let them turn them into Greek, when they have done which, you may let them see the authors, that by them they may discover their own failings and endeavor to amend them.

Their lessons then for the fourth quarter on Mondays and Wednesdays should be in *Theognis*, in which most pleasing poet they may be taught not only to construe and parse, as formerly, but also to mind the dialects, and to prove and scan, and to try how to make hexameter and pentameter Greek verses, as they formerly did Latin ones, out of *Ovid de Tristibus*. And here I must not forget to give notice to all that are taken with this author, that Mr. Castilion's *Praelectiones* (which he sometimes read at Oxford, in Magdalen College, and Mr. Langley, late schoolmaster of Paul's, transcribed when he was student there) are desirous to see the light, were they but helped forward by some stationer or printer that would a little consider the author's pains. I need give the work no more commendation than to say that (besides Mr. Langley who wrote it long ago) Mr. Busby, Mr. Dugard, Mr. Singleton, and some others of note, have seen the book, and judged it a most excellent piece not only to help young scholars in the understanding of *Theognis*, but also to furnish them with abundant matter of invention, and to be a precedent to students in the universities whereby they may learn to compose such kind of lectures upon other poets, either for their own private recreation or more public reading. *Screvelii Lexicon Manuale* will be very useful to this form for parsing their lessons; and *Garthii Lexicon* (which is annexed to it), *Rulandi Synonymia*, *Morelii Dictionarium*, *Billii Locutiones*, *Devarius de Græcis particulis*, *Possellii Calligraphia*, for translating Latin into Greek; but nothing is more available to gain a good style than a frequent imitation of select pieces out of *Isocrates* and *Demosthenes*, and translating one while out of the Greek into Latin, and another while out of Latin into Greek.

5. For forenoon lessons on Tuesdays and Thursdays, I make choice of *Justin* as a plain history, and full of excellent examples and moral observations, which for the easiness of the style the scholars of this form may now construe of themselves, and as you meet with an historical passage that is more observable than the rest, you may cause every one of them to write it down in English as well as he can possibly relate it without his book, and to turn it again into good Latin. By this means they will not only well heed the matter, but also the words and phrases of this smooth historian. And after half or three quarters of a year, you may make use of *Cæsar's Commentaries* or *Lucius Florus* in this manner, intermixing some of Erasmus' *Colloquies* now and then for variety's sake.

6. Their afternoon parts on Mondays and Wednesdays may be in *Janua Linguarum Græca*, translated out of Latin by Theodorus Simonius, which they may use as they formerly did the *Janua Latina Lingua*, viz., after they have construed a chapter and analyzed some harder nouns and verbs, you may let them try who can recite the most Greek names of things and tell you the most Greek words for one Latin word, and show their derivations and differences and the rules of their several accents. And to acquaint them the better with all the Greek and Latin words comprised in that book, you may cause them at every part to write out some of the Latin index into Greek, and some of the Greek index into Latin, and to note the manner of declining nouns and verbs, as the dictionaries and lexicons will show them.

7. *Virgil*, the prince and purest of all Latin poets, doth justly challenge a place in school-teaching, and therefore I would have him to be constantly and thoroughly read by this form on Mondays and Tuesdays for afternoon lessons. They may begin with ten or twelve verses at a lesson in the *Eclogues*, which

they may first repeat *memoriter* as well as they can possibly. 2. Construe and parse, and scan and prove exactly. 3. Give the tropes and figures, with their definitions. 4. Note out of the phrases and epitheta, and other elegances. 5. Give the histories or descriptions belonging to the proper names, and their etymologies.

But after they are well acquainted with this excellent poet, let them take the quantity of an eclogue at once, not minding so much to con their lessons by heart, as to understand and examine them well and often over, according to the directions which Erasmus gives, *De modo repetendæ lectionis*, which Mr. Langley caused to be printed at the end of *Lilly's Grammar* by him corrected, and Mr. Clark hath worthily inserted in his *Dux Grammaticus*. There are several translations of *Virgil* into English verse, by the reading whereof young scholars may be somewhat helped to understand the Latin better, but of all the rest Mr. Ogilby hath done it most completely, and if his larger book may be procured for the school library, the lively pictures will imprint the histories in scholars' memories, and be a means to heighten their fancies with conceits answerable to the author's gallant expressions. After they have passed the *Georgics* by the master's help, he may leave them to read the *Æneids* by themselves, having *Cerda* or *Servius* at hand to resolve them in places more difficult for them to construe, though Mr. Farnaby's *Notes upon Virgil* will assist them ever and anon.

As they read this author, you may cause them sometimes to relate a pleasing story in good English prose, and to try who can soonest turn it into elegant Latin, or into some other kind of verses which you please to appoint for them, either English or Latin, or both.

8. On Tuesdays in the afternoon you may cause them sometimes to translate one of *Æsop's Fables*, and sometimes one of *Ælian's Histories*, or a chapter in *Epictetus*, out of Greek into English, and then to turn its English into Latin, and out of Latin into Greek. And on Thursdays in the afternoon they may turn some of Mr. Farnaby's *Epigrammata Selecta* out of Greek into Latin and English verses, and some of *Æsop's Fables* or *Tully's Sentences* into Latin and afterwards into Greek verses.

You need not always let your scholars have these Greek books, but sometimes dictate to them what you would have them write, and afterwards let them compare their own doings with their author, to discover their own failings, and this will be a means to help them to write Greek truly of themselves; you may sometimes dictate a colloquy, or epistle, or a sentence, or a short history in English, and let them write it in Latin or Greek as you speak it, and by this you may try their strength at any time, and prepare them for extemporary exercises.

9. Now forasmuch as this form is to be employed weekly in making themes and verses, which they can never well do except they be furnished with matter beforehand, I would have them provide a large commonplace-book, in which they should write at least those heads which Mr. Farnaby hath set down in his *Index Rhetoricus*, and then busy themselves (especially) on Tuesdays and Thursdays in the afternoon, after other tasks ended, to collect, 1. Short histories out of *Plutarch*, *Valerius Maximus*, *Justin*, *Cæsar*, *Lucius Florus*, *Livy*, *Pliny*, *Parvus Medulla Historiæ*, *Ælianus*, &c. 2. Apologues and Fables out of *Æsop*, *Phædrus*, *Ovid*, *Natales Comes*, &c. 3. Adages out of *Adagia Selecta*, *Erasmii*

Adagia, Drax's *Bibliotheca Scholastica*, &c. 4. Hieroglyphics out of *Pierius* and *Cassinius*, &c. 5. Emblems and symbols out of *Alciat*, *Beza*, *Quarles*, *Reusnerus*, *Chartarius*, &c. 6. Ancient laws and customs out of *Diodorus Siculus*, *Paulus Minutius*, *Plutarch*, &c. 7. Witty sentences out of *Golden Grove*, *Moral Philosophy*, *Sphinx Philosophica*, *Wits' Commonwealth*, *Flores Doctorum*, *Tully's Sentences*, *Demosthenis Sententiæ*, *Enchiridion Morale*, *Stobæus*, *Ethica Ciceroniana*, *Gruteri Florilegium*, &c. 8. Rhetorical exornations out of *Vossius*, *Farnaby*, *Butler*, &c. 9. Topical places out of *Cassinius*, *Tresmarus*, *Orator Ephemereus*, &c. 10. Descriptions of things natural and artificial out of *Orbis Pictus*, *Cassinius*, *Plinius*, &c. I may not forget *Textor's Officina*, *Lycosthenes*, *Erasmii Apothegmata*, *Carolina Apothegmata*, and *Polyanthea*, which, together with all that can be got of this nature, should be laid up in the school library for scholars to pick what they can out of, besides what they read in their own authors.

Now the manner in which I would have them use them is thus: Having a theme given them to treat of, as suppose this:

Non aestas semper fuerit, compositæ nidos,

Let them first consult what they have read in their own authors concerning *Tempus*, *Ætas*, *occasio* or *opportunitas*, and then, 2. Let every one take one of those books forementioned and see what he can find in it for his purpose, and write it down under one of those heads in his commonplace-book, but first let the master see whether it will suit the theme. 3. Let them all read what they have written before the master, and every one transcribe what others have collected into his own book; and thus they may always have store of matter for invention ready at hand which is far beyond what their own wit is able to conceive. Now to furnish themselves also with copy of good words and phrases, besides what they have collected weekly and what hath been already said of varying them, they should have these and the like books reserved in the school library, viz., *Sylva Synonymorum*, *Calliepie*, *Huissie's phrases*, *Winchester's phrases*, *Lloyd's phrases*, *Farnaby's phrases*, *Enchiridion Oratorium*, *Clark's Phraseologia* and his *English Adages*; *Willis' Anglicisms*, *Barrett's Dictionary*, *Hulst* or rather *Higgins' Dictionary*; *Drax's Bibliotheca*, *Parei Calligraphia*, *Manutii phrases*, *A little English Dictionary*, 16mo., and *Walker's Particles*; and if at any time they can wittily and pithily invent any thing of their own brain, you may help them to express it in good Latin, by making use of *Cooper's Dictionary*, either as himself directeth in his preface or *Phalerius* will more fully show you in his *Supplementa ad Grammaticam*.

And to draw their words and matter into the form of a theme with ease, let them have sound patterns to imitate, because they in every thing prevail to do it soonest and surest.

First therefore let them peruse that in *Merchant Tailors' School Probation Book*, and then those at the end of *Winchester's phrases*, and those in Mr. Clark's *Formula Oratoriæ*; and afterwards they may proceed to those in *Aphthonius*, *Rudolphus Agricola*, *Catineus*, *Loricæus*, and the like, and learn how to prosecute the several parts of a theme more at large by intermixing some of those *Formula Oratoriæ* which Mr. Clark and Mr. Farnaby have collected, which are proper to every part, so as to bring their matter into handsome and plain order, and to flourish and adorn it neatly with rhetorical tropes and figures, always

regarding the composition of words, so as to make them run in a pure and even style, according to the best of their authors, which they must always observe as precedents.

But the best way (as I conceive) to encourage children at the first against any seeming difficulty in this exercise of making themes is this: After you have shown them how to find matter, and where to help themselves with words and phrases, and in what order they are to dispose the parts, and what formulas they are to use in passing from one to another; propound a theme to them in English and Latin, and let them strive who can soonest return you the best exordium in English, and then who can render it into the best Latin, and so you may proceed to the narration and quite through every part of a theme, not tying them to the words of any author, but giving them liberty to contract or enlarge or alter them as they please, so that they still contend to go beyond them in purity of expression. This being done, you may dismiss them to adventure to make every one his own exercise in English and Latin, and to bring it fairly written, and be able to pronounce it distinctly *memoriter* at a time appointed. And when once you see they have gained a perfect way of making themes of themselves, you may let them go on to attain the habit by their own constant practice, ever and anon reminding them what places in their authors (as they read) are most worthy of notice and imitation, and for what purposes they may serve them.

10. Touching learning to scan and prove and make all sorts of verses, I have spoken in the former chapter; now for diligent practice in this kind of exercise, they may constantly comprise the sum of their themes in a distich, tetrastich, hexastich, or more verses, as they grow in strength. For invention of further matter upon any occasion or subject they are to treat upon, they may sometimes imitate places out of the purest poets, (which Mr. Farnaby's *Index Poeticus* will point them to, besides what they find in *Flores Poetarum* and *Sabinus de Carminibus ad veterum imitationem artificiose componendis*, at the beginning of *Textor's Epistles*, will further direct them) and sometimes paraphrase or (as some term it) metaphrase upon a piece of a historian or orator, endeavoring in a lively way to express in verse what the author hath written in prose, and for this Mr. Horne hath furnished you with two examples in this excellent *χρησιν, de usu Authoris*.

For variety and copy of poetical phrases, there are many very good helps, viz., *Phrases Poeticae*, besides those of Mr. Farnaby's; *Abrarium Poeticum*, *Enchiridion Poeticum*, *Res Virgiliana*, *Artis Poeticae Compendium*, *Thesaurus Poeticus*, and others, worthy to be laid up in the school library. *Textor* will sufficiently supply choice epithets, and *Smetii Prosodia* will afford authorities, (which is lately comprised and printed at the end of *Lilly's Grammar*.) But for gaining a smooth way of versifying, and to be able to express much matter in few words and very fully to the life, I conceive it very necessary for scholars to be frequent in perusing and rehearsing *Ovid* and *Virgil*, and afterwards such kind of poets as they are themselves delighted withal, either for more variety of verse or the wittiness of conceit's sake. And the master indeed should cause his scholars to recite a piece of *Ovid* or *Virgil* in his hearing now and then, that the very tune of these pleasant verses may be imprinted in their minds, so that whenever they are put to compose a verse, they make it glide as even as those in their authors. Mr. Rosse in his *Virgilius Evangelizans* will easily show how a young scholar may imitate *Virgil* to the life.

From this little that hath been said, they that have a natural aptness and delight in poetry may proceed to more exquisite perfection in that art than any rules of teaching can reach unto; and there are very few so meanly witted, but by diligent use of the directions now given may attain to so much skill as to be able to judge of any verse, and upon a fit occasion or subject to compose a handsome copy, though not so fluently or neatly as they that have a natural sharpness and dexterity in the art of poetry.

11. When they in this form have gone thrice over the *Assembly's Catechism* in Greek and Latin, they may proceed in *Nowel's Catechism*, or the *Palatinate Catechism* in Greek.

And now to sum up all concerning the fifth form, 1. Let them read constantly twelve verses at least in the *Greek Testament*, before parts. 2. Let them repeat the *Latin* and *Greek Grammars* and *Elementa Rhetorices* on Thursday mornings. 3. Let them pronounce orations on Mondays, Tuesdays and Wednesdays, instead of parts, out of *Livy*, &c. 4. Let their forenoon lessons on Mondays and Wednesdays be in *Isocrates* for three quarters of a year's space, and for the fourth quarter in *Theognis*. 5. Let their forenoon lessons on Tuesdays and Thursdays be in *Justin's History*, and afterwards in *Cæsar's Commentaries*, *Lucius Florus*, or *Erasmus' Colloquies*. 6. Let their afternoon parts on Mondays and Tuesdays be in *Januæ linguarum Græcæ*, and 7. Their afternoon lessons in *Virgil*. 8. Let them on Tuesdays in the afternoon translate out of Greek, *Æsop's Fables*, *Ælian's Histories*, *Epictetus*, or *Furnaby's Epigrammata*. 9. Let them be employed weekly in making a theme, and 10. In a copy of verses. 11. Let them say *Nowel's Catechism* or the *Palatinate Catechism* on Saturdays. By this means they will become familiarly acquainted with the Latin and Greek tongues, and be able to peruse any orator or poet in either language, and to imitate their expressions and apply what matter they find in them to their own occasions. And then they may courageously adventure to the sixth and highest form.

III.—*How to enter the scholars of the sixth Form in Hebrew. How to employ them in reading the best and most difficult authors in Latin and Greek, and how to acquaint them with all manner of school exercises, Latin, Greek, or Hebrew.*

This sixth form is looked upon as the main credit of a school, and the master commonly delighteth most in teaching it, because therein he seems to reap the fruit of those labors which he hath bestowed formerly. His care therefore is to exercise them in everything that may complete a scholar, so that whether they be privately examined or upon any public solemnity required to show their parts, they may satisfy them that desire an account, and gain to themselves applause. And whereas I observe more variety in teaching this form than the rest, because almost every master observes a several method in reading such authors as himself best liketh, I will not much trouble myself to declare what others do, but as plainly as I can, discover what course I have hitherto taken to enable these highest scholars to shift for themselves.

1. Make them read (at least) twelve verses out of the *Greek Testament* into Latin or English, or out of the *English* or *Latin Testament* into Greek, every morning, before they say parts.

2. Let them repeat parts (as they did before) out of the *Latin* and *Greek Grammars* and *Elementa Rhetorices* every Thursday morning, and give account of what grammatical or rhetorical notes they have collected and written fairly in their commonplace-books for those arts. Besides the books which I formerly

mentioned, I desire that *Goclenii observationum linguæ Latinæ Analæcta et Problemata Grammatica* may be made use of for this purpose.

3. Their parts on Mondays, Tuesdays and Wednesdays may be to learn the Hebrew tongue, which is very necessary for all such as would be acquainted with the original of the Bible, and is not very difficult to attain to, because it goeth word for word with our English, and is not so copious in words as the Greek and Latin. And whereas many defer the Hebrew to be learned at the university, I may say it is rarely attained there by any that have not gotten (at least) the rudiments of it beforehand at a grammar school.

Now for the entering of them upon this holy language, I conceive *Buxtorf's Epilome* is the best introduction of Hebrew grammar; partly because it is the most used in schools, and partly because most easy for young scholars to apprehend; though some prefer *Martinus*, others *Bellarmino*, others *Amoma*, others *Blebetius*, and others *Horologium Hebrææ linguæ*, before it. Now in teaching *Buxtorfe* you may read your scholars a part of it, and cause them again to read it over perfectly in your hearing, and then let them get it by heart, as they did other parts, and when they recite be sure to examine how well they understand it. As they go over this grammar they should write out the letters and chiefest rules, but especially the declining of nouns and pronouns, and all the paradigms, of the conjugations both in Hebrew and Latin characters, with their proper significations; and this will cause them to mind the different shape of the consonants and vowels and accents, and help to strengthen their memory in getting the rules by heart. They may get every day a certain number of Hebrew roots, together with their grammar parts, out of some nomenclator or lexicon.

After they have learned the grammar, you may exercise them in those texts of Scripture annexed as a praxis at the end of it, which they must exactly construe and parse, and write fairly, by way of interlineary.

As they go over the Psalter they may sometimes translate their lessons into Latin, and read them out of Latin into Hebrew in a paper book. Then they may with facility run along the Psalter, having *Tossani syllabus geminus* to help them in every word. Afterwards they may proceed in the Proverbs, Ecclesiastes, Job, of themselves; but be sure they be well acquainted with the rules of finding a radix in *Buxtorfe*, or *Pagnine*, or the like useful *Lexicon*, which are fit to be reserved in the school library. Though it be found a thing very rare, and is by some adjudged to be of little use, for school-boys to make exercises in Hebrew, yet it is no small ornament and commendation to a school (as Westminster School at present can evidence) that scholars are able to make orations and verses in Hebrew, Arabic or other oriental tongues, to the amazement of most of their hearers, who are angry at their own ignorance, because they know not well what is then said or written. As for orations, they may be translated out of Latin into Hebrew by help of *Schindleri Pentaglotton*, *Buxtorfius*, *Pagnine Crinesius*, or *Trostius' Lexicon*; and for verses, *Buxtorf's Thesaurus* will afford some rules and precedents, and *Aviani Clavis Poeseos Sacræ* all sorts of rhythms.

They that are more industriously studious in the Hebrew may profit themselves very much by translating *Janua Linguarum* into that language.

This that I have said may seem enough to be learnt at school, but if one desire to learn those oriental tongues in which the great Bible is now happily printed, (by the great vigilance and industry of Doctor Walton, who hath carried

on the work to the honor of this nation, the comfort of the poor Church of England, and the encouragement of good literature, in the midst of distracting times) he may make use of *Introductio ad lectionem Linguarum Orientalium*, and of the *Lexicon* (which I conceive ere this time is well-nigh finished) made on purpose to explicate the words of the Bible according to their several languages, viz., Hebrew, Chaldee, Samaritan, Syriac, Arabic, Persian, Ethiopic, Armenian, and Coptic, which is a kind of Egyptian tongue.

4. Their forenoon lessons on Mondays and Wednesdays may be in *Hesiod's* *Ἑσίοδος καὶ ἡμετέρας*, which they may now construe and parse of themselves by help of the Latin translation, and *Pasor* upon it, or *Screvelii Lexicon*; only yourself may now and then illustrate some harder places out of *Cerapine* and *Melanthon's Commentary*, published by Johannes Frisius Tigurinus; and cause them to paraphrase in Greek upon such lessons as are full of excellent matter, and which are worth getting by heart.

When they have gone over this, they may proceed in like manner to *Homer*, in which they may help themselves out of *Clavis Homerica* or *Lexicon Homericum*, or those *Quorundum verborum Themata* at the end of *Scapulae Lexicon*. You may illustrate the difficult places in him out of *Eustathius' Commentary*, and let your scholars write some of his narrations in good Latin and Greek phrase. Chapman's English translation of *Homer* will delight your scholars to read in at leisure, and cause them better to apprehend the series of his poetical discourses. When they are well acquainted with this father of poetry, (which will be after they have read two books either of his *Iliad* or *Odyssey*) you may let them proceed to *Pindar*, and after they have tasted some of his odes by the help of *Benedictus' Commentary*, you may at last let them make use of *Lycephron*, which they will better do, having *Canterus* or *Zetzius* to unfold his dark meaning, and *Longolii Lexicon* to interpret and analyze most of his uncouth words.

5. Their forenoon lessons on Tuesdays and Thursdays may be in *Xenophon's* *κατὰ Κίρην παιδείας* for the first quarter or somewhat longer, and afterwards in some of *Euripides'* and *Sophocles' Tragedies*, which you please to pick out, to enable them for the rest; and if to these you add a few of *Aristophanes' Comedies*, which they may better understand by the help of *Bisotus* upon him, I suppose, you may turn them to any other Greek author, and they will give you a reasonable account thereof, having but a little time allowed them to deliberate upon it, and necessary subsidiaries at hand to help themselves withal in case they be put to a stand.

6. Their afternoon parts on Mondays and Wednesdays may be in *Ant. de Laubegeois Breviarium Græcæ Linguae*, partly because the perusal of that book will help them to retain all the Greek vocabularies in mind, and partly because those excellent sentences being picked out of many authors, will acquaint them with most of the hard words that they are likely to find in them.

7. Their afternoon lessons may be in *Horace*, wherein they should be employed, 1. In committing their lessons to memory, as affording a rich mine of invention. 2. In construing and parsing, and giving the tropes and figures. 3. In scanning and proving verses. 4. Sometimes in turning an ode or epistle into other kinds of verses, English, Latin, or Greek; sometimes in paraphrasing or enlarging the words in an oratorical style, as Mr. Horne doth give some examples in his little golden book, *De usu Authoris*.

Mr. Farnaby's or Mr. Bond's *Notes* upon this poet will encourage your scholars to proceed in him; and after they have read what you best approve (for he that feeds cleanly will pare his apple) in this author, you may let them proceed to *Juvenal*, and read some select satires, by help of *Farnaby's Notes* or *Lubin's Commentary*, and then let them read *Persius* quite through, which (besides the notes upon him) Mr. Holyday's English translation will help them well to understand. As for *Lucan*, *Seneca's Tragedies*, *Martial*, and the rest of the finest Latin poets, you may do well to give them a taste of each, and show them how and wherein they may imitate them or borrow something out of them. Mr. Farnaby's *Notes* upon them will be helpful to understand them, and *Pareus*, or *Tusman* upon *Plautus*, will make some merry comedies of his that may be easily read over.

8. They may read some of *Luciani selecti mortuorum dialogi* on Tuesdays in the afternoon, and if those printed at Paris by Sebastian and Gabriel Cramoisy, *Cum interpretatiōne Latinā et Grammaticā singularum vocum explanatione*, were to be had, they might easily run them over, but (I suppose) they will now be able to go on of themselves in the perusal of those lately printed by Mr. Dugard. After lessons ended, they may benefit themselves by reading *Jacobi Pontani Progymnasmata Latinitatis*, which will furnish them with good expressions for speaking Latin, and acquaint them with some patterns for exercises which are not elsewhere usually found.

9. On Thursdays they may be employed in reading some of *Tully's* orations, especially *Pro Archia contra Catalinam* and *Philippicæ*; and afterwards they may peruse *Pliny's Panegyrica* and *Quintilian's Declamations*. After lessons ended, they may busy themselves in perusing *Goodwin's Antiquities* or the like. And here I do heartily wish, as Mr. Horne hath done formerly, that some one of better leisure and abilities would make an *Index Oratorius*, like the *Index Poeticus* of Mr. Farnaby's, which may point at the marrow of matter and words in all the purest orators that are extant, either ancient or modern, and that those authors might be reserved in the school library, whereunto scholars may have recourse touching any subject whereof they may have occasion to treat in their school exercises.

10. In the meantime this form should continue to make themes and verses, one week in Greek and another in Latin, and ever and anon they may contend in making orations and declamations, for which exercise they may find helps and patterns in Mr. Clerk's *Formule Oratoriæ*, and Mr. Horne's *De usu Authoris*. Likewise to bring themselves to a habituated perfection of good style, they should be frequent in perusing and excerpting passages that may serve for their occasions out of *Tully*, *Quintilian*, *Livy*, *Sallust*, *Tacitus*, *Quintus Curtius*, or the like ancient orations, and acquaint themselves with those modern orators whose eloquence we admire, viz., *Turnerus*, *Baudius*, *Muretus*, *Heinsius*, *Puleanus*, *Rainoldus*, *Lipsius*, *Barclaius*, *Salmatius*, and others, to be laid up in the school library. *Tesmarus* and *Orator Extemporaneus* will show them how to dispose their matter so as to make an oration on any subject in Latin, *extempore*; and *Aphthonius* and *Libanius Sophista* will furnish them with patterns in Greek. For learning to write Greek epistles they may consult *Isocrates' Epistles* and *Symmachus*.

They should often also vie wits amongst themselves, and strive who can make the best anagrams, epigrams, epitaphs, epithalamias, eclogues, acrostics, and

golden verses, in English, Latin, Greek, and Hebrew; which they will easily do after a while, having good patterns before them to imitate, which they may collect out of authors as they fancy them, for their own use and delight.

11. When they have done with *Nowell*, they may proceed to *Birket's Catechism* in Greek, or our common *Church Catechism* in Hebrew, which was printed for the company of stationers in four languages, A. D. 1638.

Thus have I at last done with my school discovery, in which I have proceeded so far as to make any author seem easy to young scholars in their future progress at the universities, where I would advise them (that have purses especially) to provide themselves with all the Latin and Greek orators and poets, and what they can not understand without a commentary or scholiast, to procure those whereby they may best help themselves, and to have *Stephani Thesaurus*, (Greek and Latin,) *Suidas*, *Hesychius*, *Budæus' Commentaries*, and the like, ever at hand, that they may be sure to improve themselves in the Latin and Greek tongues, as well as to mind the daily study of the arts and sciences which are delivered in them.

1. And would some able tutor take the pains to describe a right method of study and in what authors students may best bestow their time for the first four years, it would doubtless be a means to encourage them to go on to that height of perfection which we see few attain to, and those not until they be ready to drop into their graves: and then they wish they could once run over again their former studies, and tell how easily they could cope-gain that little measure of knowledge which they have so industriously sought for all their life.

The constant employment of this sixth form is,

1. To read twelve verses out of the *Greek Testament* every morning before parts.

2. To repeat Latin and Greek grammar parts and *Elementa Rhetorices* every Thursday morning.

3. To learn the Hebrew tongue on Mondays, Tuesdays and Wednesdays, for morning parts.

4. To read *Hesiod*, *Homer*, *Pindar*, and *Lycophron*, for forenoon lessons on Mondays and Wednesdays.

5. *Xenophon*, *Sophocles*, *Euripides* and *Aristophanes* on Tuesdays and Thursdays.

6. *Laubegeotis Breviarium Græcæ linguae* for afternoon parts on Mondays and Wednesdays.

7. *Horace*, *Juvenal*, *Persius*, *Lucan*, *Seneca's Tragedies*, *Martial* and *Plautus*, for afternoon lessons on Mondays and Wednesdays.

8. *Lucian's Select Dialogues* and *Pontani Progymnasmata Latinitatis* on Tuesday afternoons, and

9. *Tully's Orations*, *Pliny's Panegyrics*, and *Quintilian's Declamations* on Thursday afternoons, and *Goodwin's Antiquities* at leisure times.

10. Their exercises for oratory should be to make themes, orations and declamations, in Latin, Greek, and Hebrew; and for poetry to make verses upon such themes as are appointed them every week.

11. And to exercise themselves in anagrams, epitaphs, epithalamias, eclogues, and acrostics, in English, Latin, Greek, and Hebrew.

12. Their catechisms are *Nowell* and *Birket* in Greek, and the *Church Catechism* in Hebrew. So that in six (or at the most seven) years' time, (which

children commonly squander away, if they be not continued at the school, after they can read English and write well) they may easily attain to such knowledge in the Latin, Greek, and Hebrew tongues, as is requisite to furnish them for future studies in the universities, or to enable them for any ingenious profession or employment which their friends shall think fit to put them upon in other places.

But having somewhat to say further touching the well ordering of a grammar school, (for I have here insisted chiefly concerning teaching) I shall endeavor to proceed in my next treatise with school discipline.

In the meantime you may observe that the method which I have here discovered is for the most part contrived according to what is commonly practiced in England and foreign countries, and is in sundry particulars proportioned to the ordinary capacities of children under fifteen years of age. The subject matter which is taught is the same as that which is generally used in grammars, authors, and exercises. Touching grammars, I prefer *Lilly's* for Latin, *Camden's* for Greek, and *Buxdorf's Epitome* for Hebrew, not excluding any other that may conduce to the completing of grammar art. The authors which I prescribe to be used are partly classical, which every scholar should provide for himself; and because these are constantly learnt in most grammar schools, I appoint them to be read at such times as are usually spent in lessons.

The subsidiary books are those which are helpful to children in performing their tasks with more ease and benefit; and because all the scholars will not have like need of them, and they are more than any one will desire to buy, these should be laid up in the school library, for every form to make use of, as they shall have occasion. Some of these serve chiefly for the explication of grammar, and are applied to it; some are needful for the better understanding of classical authors, and are appropriated to them, and others are very requisite for the gaining of words and phrases and an ability for speaking or writing elegantly, and such times are set apart for perusing them as are commonly truanted in idleness or needless sport. Now by the joint using of these together, I endeavor that a scholar may have a pretty thorough knowledge of the language which he learneth, as well as of his bare grammar rules, without which it signifieth nothing. And therefore to help children more easily to gain the Latin, I have translated such books as they learn whilst they get the grammar, into their own mother tongue, so that by comparing and using both together, they may be able after good acquaintance with the Latin to wean themselves quite from English. He that desires further satisfaction concerning the translations which I have already made, may peruse the advertisement that I caused to be printed before *Cato's Disticha*, in English and Latin.

And if any man shall think to tell me that I seem to trouble my scholars with too many books at once, because a few if well learned will suffice to make a grammarian, I will give him here to consider:

1. That I have to deal with children who are delighted and refreshed with a variety of books, as well as of sports and meats.
2. That a schoolmaster's aim being to teach them languages and oratory and poetry, as well as grammar, he must necessarily employ them in many books which tend thereunto.
3. That the classical authors are the same as in other schools, and subsidiaries may be provided at a common charge, as I shall afterwards show.

The scholars in a grammar school may be fitly divided into six forms, whereof the three lowest, which are commonly under an usher, may be termed,

1. Rudimentaries, that learn the grounds.
2. Practitioners, that exercise the rules.
3. Proficients, that can speak and write true Latin.

The three highest forms are employed by the master to learn the Greek and Hebrew tongues, together with the Latin, and to gain some skill in oratory and poetry, and matters of humanity; and of these I may name the lowest *Tertiani*, the middlemost *Secundani*, and the highest *Primani*, because they seem to differ one from another in ability of learning, as the Roman legionary soldiers did in strength and the use of arms.

This division I have purposely made, so that whether one master alone be put to teach the whole, or have one, two or more ushers to assist him, he may constantly train up his scholars by one and the same way of teaching, (altering now and then only some circumstances, as his own discretion shall better direct him,) and every scholar may from his first entrance to the school proceed with cheerfulness in learning, when he seeth plainly what he is to do from year to year, and how others before him in a playing manner overskip those seeming difficulties which he imagineth in his mind. And I conceive it will be no small satisfaction to parents, and a mean to cease the indiscreet clamors of some against schoolmasters, to see what method they observe in teaching, and how their children profit by degrees, according to their present apprehensions and growth in years.

And now the God of heaven and earth, in whose power alone it is to give increase, vouchsafe to bestow such a blessing upon our planting and watering, that our young plants may grow up in all godliness and good learning, and abound in the knowledge of our Lord Jesus Christ, whom only to know is eternal life. *Amen.*

SCHOLASTIC DISCIPLINE.*

BY CHARLES MOOLE, A. M.,

Master of a Grammar School at Rotherham in 1636, and of a Private School in London in 1660.

CHAPTER I.—*Of the Founding of a Grammar School.*

THE most of the grammar schools which I have yet taken notice of in England are of two sorts. The first I may call mixed schools, where a structure is made, and an allowance given of ten, twenty, or thirty pounds per annum only to one man to teach children freely that inhabit within the precincts of one parish or of three or four neighboring hamlets adjoining. And such schools as these very seldom or never improve scholars further than to teach them to read and write, and learn some little (they know not what it meaneth) in the common grammar; partly because the master is overburdened with too many petty scholars, and partly because many parents will not spare their children to learn, if they can but find them any employment about their domestic or rural affairs, whereby they may save a penny. In some places more populous, an allowance is made to a master of about twenty pounds per annum to attend grammarians only, and ten pounds to an usher, whose work it is to teach the petties. In such schools as these, I have known some boys more pregnant-witted than the rest, to have proved very good grammarians, and to have profited so in the Latin and Greek tongues as to come to good maturity in university studies, by a tutor's guidance. But the masters of such schools for the most part either weaken their bodies by excessive toil, and so shorten their days; or (as soon as they can fit themselves for a more easy profession, or obtain a more profitable place) after a few years quit their school, and leave their scholars to another's charge, that either hath his method to seek, or else trains them up in another quite different from that which they had been used to. And thus through the

* The following is a copy of the original title page:

SCHOLASTICK DISCIPLINE:

OR,

The WAY of ordering
a Grammar-Schools,
Directing the not experienced
how he may profit every particular
Scholar, and avoyd
Confusion amongst

a multitude.
By C. H.

LONDON,

Printed by J. T. for Andrew Crook,
at the Green Dragon in Pauls
Church Yard, 1659.

change of masters the scholars are either dispersed or hindered from going on with that alacrity and profit which otherwise they might.

The second sort of schools are those which are purely grammatical, being especially conversant in teaching the art of grammar. Now some of these have yearly salaries for a master and one usher, where the master is employed in perfecting those scholars which the usher hath already grounded. And many of these schools, (especially if they be situated in places where accommodation is to be had for tabling,) do happily train up many scholars which about sixteen or seventeen years of age are fit to be sent to the university. But in regard there is no preferment attending these schools, the most pregnant-witted children are commonly taken thence, after they are well grounded, and disposed on to other places, where they may gain it. So that of all others our collegiate schools, or those that come nearest them, have the greatest advantage of making most scholars. For these having commonly large revenues belonging to them, do not only provide sufficiently for a master and one usher at least, but also for a certain number of scholars, which being for the most part the choicest wits picked out of other schools, and such as depend upon hopes of advancement, do industriously bestir themselves to attain what learning they can, and submit themselves orderly to such discipline as is there exercised. But forasmuch as these greater schools rather intend the forwarding of such children as are already grounded, than busy themselves about mere rudiments, it causeth many parents to disperse their little ones abroad to tabling-schools, where (for the most part) there is but one man to teach a few promiscuously hand-over-head, without any settled method, and these changing and removing ever and anon as cause is offered, do seldom attain any stable proficiency in grammar learning. Yet in some of these, where an able schoolmaster is well seated and provided with all fitting accommodations, so as to entertain many gentlemen's sons of good quality, and an able usher to assist him in teaching, I have observed children to make double profiting in respect to other schools, because they have the advantage of spending much of that time at their books which others trifle away in running up and down about home; not to say that the constant eye of the master is an especial means to regulate them in point of behavior.

Now comparing all the schools which we have in England with some that I read of in other countries, (that I may speak freely, and without offense to any man, submitting myself herein also to the judgment of those of my profession,) I do not know one that is so completed as (perhaps) many might easily be, with all necessary accommodations and advantages to improve children to what they are capable of in their playing years, and wherein we evidently see how many places of education beyond the seas do quite outstrip us.

And therefore from what I have heretofore read in Mr. Mulcaster's *Positions concerning the training up of children*, in chap. 40, (which he wrote when he had been twenty years schoolmaster at Merchant Tailors' School, which was erected in 1561, being afterwards head master of Paul's in 1600,) and what I have been informed touching Mr. Farnaby's improvement of a private grammar school in Goldsmith's alley, now called New street, also Jewen street; and what I myself have experienced for about fourteen years together both in that place and in Lothbury Garden, I am induced to think that it is a matter very feasible to raise many of our grammar schools to a far higher pitch of learning than is ordinarily yet attained in England. For whereas in most of our grammar schools (as I

have noted) there is but one, two, or three ushers besides a master, employed in teaching the Latin and Greek tongues, and some smattering of the Hebrew, together in one room to six or seven forms of scholars, who by reason of the noise of one another (not to mention the clamor of children) and the multiplicity of their work, with several boys in each form, do both over tire themselves and many times leave things to the halves; I conceive a course may be taken (especially) in cities, and towns of greater concourse, to teach a great multitude of scholars (as Corderius professeth to have taught five hundred, and I have been informed that in some places beyond seas, twenty-five hundred are taught in one school) without any noise, in a pleasing and profiting manner, and in their playing years, not only the English, Latin, and Greek tongues) together with the duties of piety and civil behavior) but also the Eastern and other needful foreign languages, besides fair writing, arithmetic, music, and other preparatory arts and sciences which are most obvious to the senses, and whereof their younger years are very capable; that thereby they may be fitted for ingenious trades or to prosecute higher studies in the universities, and so be able (when they come to man's estate) to undertake the due management of private or public affairs, either at home or in other countries.

He that shall but consider the low ebb that learning was brought to (by reason of the Danish barbarism) in England in King Alfred's days, who could not find a master in all his dominions to teach him the Latin tongue, (which he began to learn at thirty-six years of age, having begun to read English at twelve, which his elder brethren, because less studious, could not attain to) and the paucity of them that understood Greek not much above threescore years ago, when a scholar (yet living) of thirteen years old from the school was owned as a better Grecian than most of the Fellows of the College to which he went; he that, I say, shall consider the former rareness of the Latin and Greek tongues in England, and now see how common they are (especially since Queen Elizabeth's days, in whose time more schools were built than there were before in all her realm,) and withal take notice what an excellent improvement that noble spirited Mr. Busby hath of late made at Westminster School, where the Eastern languages are now become familiar to the highest sort of scholars, will undoubtedly think (as I do) that our children may be brought on to far more knowledge of language and things than hitherto they have been, and that also in a more easy manner.

And forasmuch as I observe it as a great act of God's mercy towards his Church, that, in this jangling age of ours, wherein too many decry learning, he hath raised up the spirit of some that know better what it is, to endeavor heartily to advance it, I shall here address my words to such, whosoever they are, but more especially to the honorable and reverend trustees for the maintenance of students. And as before I have hinted somewhat touching the erecting of petty schools (whereof there is great need, especially) in London, so I will here presume (and I hope it will prove no offense) to publish what I have often seriously thought and sometimes spoken with some men's approbation, touching the most convenient founding of a grammar school; that if it shall please God to stir up any man's spirit to perform so pious a work, he may do it to the best advantage for the improvement of piety and learning. For when I see in many places of this land what vast sums have been expended (even of late) in erecting stately houses and fencing large parcels of ground for

orchards and gardens and the like, and how destitute for the most part they stand, and remain without inhabitants, I am too apt to think that those persons who have undergone so great a charge to so little purpose, would willingly have disbursed as much money upon a public good, did they but rightly know how to do it; since thereby their name and memory will be more preserved, especially if they have no children or posterity of their own to provide for.

But to return to the contrivance of a school, which is to be in many things (as I have mentioned) above the ordinary way of schooling, yet gradually distant from and subordinate to university colleges, which would thence also take a further rise towards perfection in all kinds of study and action. For the better grounded a scholar is in the principles of useful matters when he comes to the university, the greater progress he will make there in their superstructures, which require more search and meditation; so that at last he will be able to discover many particulars which have not yet been found out by others, who (perhaps) have not gone so rationally to work as he may do, having obtained the whole encyclopedia of learning to help him in all sorts of books.

Such a school then as may be fit for the education of all sorts of children (for we have seen the very poorest come to dignities of preferment by being learned,) should be situated in a city or town of great concourse and trading, whose inhabitants are generally addicted and sufficiently accommodated to entertain tablers, and are unanimously well affected towards piety, learning and virtue. The place should be healthfully and pleasantly seated in a plentiful country, where the ways on all sides are most commonly fair, and convenient passage is to be had from remoter parts both by land and by water.

The school-house should be a large and stately building, placed by itself about the middle of the outside of a town, as near as may be to the church and not far from the fields, where it may stand in a good air and be free from all annoyances. It should have a large piece of ground adjoining to it, which should be divided into a paved court to go round about the school, a fair orchard and garden, with walks and arbors, and a spacious green close for scholars' recreations; and to shelter the scholars against rainy weather, and that they may not injure the school in times of play, it were good if some part of the court were shedded or cloistered over.

This school-house should be built three stories high, whereof the middlemost, for more freedom of the air, should be the highest abovehead, and so spacious that it may contain (at least) five hundred scholars together, without thronging one another. It should be so contrived with folding doors made betwixt every form, as that upon occasion it may be all laid open into one room, or parted into six, for more privacy of hearing every form without noise or hindrance one of another. There should be seats made in the school, with desks before them, whereon every scholar may write and lay his book, and these should be so placed that a good space may be left in the middle of the school, so that six men abreast may walk up and down from form to form. The ushers' pews should be set at the head ends of every form, so that they may best see and hear every particular boy. And the master's chair should be so raised at the upper end of the school that he may be able to have every scholar in his eye, and to be heard of all when he hath occasion to give any common charge or instruction. There may be shelves made round about the school, and boxes for every scholar to put his books in, and pins whereon they may hang their hats,

so that they be not trodden (as is usual) under feet. Likewise every form should have a repository near unto it, wherein to lay such subsidiary books as are most proper for its use. The lowest story may be divided into several rooms, proportioned according to the uses for which they are intended, whereof one should be for a writing school, another for such languages as are to be taught at spare hours; and a third as a petty school for such children as can not read English perfectly, and are intended for the grammar school. A fourth room may be reserved for laying in wood and coals, and the rest made use of for ushers or scholars to lodge in, or the like occasion, as the master shall think best to dispose of them to the furtherance of his school. In the uppermost story there should be a fair, pleasant gallery wherein to hang maps and set globes, and to lay up such rarities as can be gotten in presses or drawers, that the scholars may know them. There should likewise be a place provided for a school library, and the rest may be made use of as lodging rooms for ushers and scholars. But the whole fabric should be so contrived that there may be sufficient lights and chimneys to every form and room. As for a house of office, it should be made a good distance from the close, where it may be most out of sight and least offensive.

The master's dwelling-house should be nigh the school, and should contain in it all sorts of rooms convenient for entertainment and lodging, and necessary offices that pertain to a great family. It should have a handsome court before it and a large yard behind it, with an orchard and garden, and some inclosure of pasture ground. And there should be two or three rooms made a little remote from the dwelling-house, to which scholars may be removed and kept apart, in case they be sick, and have somebody there to look to them.

Now that every scholar may be improved to the utmost of what he is capable, the whole grammar school should be divided into six forms, and those placed orderly in one room, which (as I have described) may be so divided into six that the noise of one form may not at all disturb or hinder another. There should also be six able ushers, for every particular form one, whose work it should be to teach the scholars according to the method appointed by the master, and (that every one may profit in what he learneth) to be sure to have respect to the weakest, and afford them the most help.

The master should not be tied (as is ordinary) to a double work, both to teach a main part of the school himself, and to have the inspection and government over all; but his chief care should be (and it will be business enough for one) to prescribe tasks and to examine the scholars in every form, how they profit, and to see that all exercises are duly performed and good order constantly observed, and that every usher is dexterous and diligent in his charge, and moderate in executing such correction as is necessary at any time to be inflicted for vicious enormities, but seldom or never for errors committed at their books.

As for the maintenance of such a school, it should be so liberal that both master and ushers may think their places to be preferment sufficient, and not be forced to look for further elsewhere, or to direct their spare hours' studies towards other callings. It were to be wished therefore that a constant salary of (at least) 100*l.* per annum might be allowed to the master, and 30*l.*, 40*l.*, 50*l.*, 60*l.*, 70*l.*, 80*l.* per annum to his six ushers. The raising of which maintenance, (to use Mr. Mulcaster's words) as it will require a good mind and no mean purse, so it needs neither the conference of a country nor yet the revenue of a

Roman emperor. Besides, the master for his encouragement should have liberty to make what benefit he can by tabling-in strangers; and every one of the abler sort of inhabitants in the town should pay him (at least) 10s. per quarter for a son's teaching, but all the poorer children should be taught gratis, on condition that they be sent constantly to the school, and that their parents do engage that they shall keep good order and be cleanly and neat in their apparel, that they may not seem to disgrace their fellows or to be disdained by them for their poverty.

It would withal be a great encouragement to this poorer sort of children to learn, if some whom God hath enriched with more than enough would spend the *supererogation* of their wealth (as Mr. Mulcaster terms it,) in affording exhibitions of 8l. or 10l. per annum towards keeping them at the school, or sending them abroad, as they are fit, to trades or universities. They that go thither should have larger exhibitions allowed them, upon condition that they employ more time than others in the study of tongues and critical learning, for the promoting whereof I shall only propound Mr. Mulcaster's question in his own words, which are these: "If there were one college where nothing should be professed but languages only, (as there are some people who will proceed no further) to serve the realm abroad and studies in the university, in that point excellently and absolutely were it not convenient? nay, were it not most profitable," &c. As for what he writes further, (in chap. 41 of his *Positions*) touching the division of colleges by professions and faculties; and Mr. John Drury hath lately published (in his *Reformed School* and his *Supplement* thereto) concerning the bringing together into one society such as are able to exercise themselves in any or all kinds of studies, that by their mutual association, communication, and assistance in reading, meditating, and conferring about profitable matters, they may not only profit their own abilities, but advance the superstructures of all learning to that perfection which by such means is attainable; I refer the more judicious to their books, and leave it to the consideration of those that endeavor to promote school-teaching, whether such a school as I have now delineated would not be of great concernment to the church and commonwealth, whereout to pick more able schoolmasters that by degrees have been exercised in teaching all sorts of scholars for (at least) seven years together, than many men that have scarce saluted or are newly come from the universities can suddenly prove to be. For I think it one thing to be a good schoolmaster, and another thing to be a good scholar, though the former can not well do his duty as he ought except he be also the latter.

I might here bewail the unhappy divertment of Jesus College in Rotherham, in which town one Thomas Scot, *alias* Rotherham, (a poor boy in Ecclesfield Parish) having had his education, and being advanced to the Archbishopric of York, in the time of Edward the Fourth, did out of love to his country and gratitude to the town, erect a college as a school, for a provost, who was to be a divine, and to preach at Ecclesfield, Laxton, and other places, (where the college demesnes lay;) and three fellows, whereof one was to teach grammar, another music, and the third writing; besides a number of scholars, for some of whom he also provided Fellowships in Lincoln College, in Oxford. But in the time of Henry the Eighth, the Earl of Shrewsbury (who, as I have heard, was the first lord that gave his vote for the demolishing of abbeys) having obtained Roughford Abbey in Nottinghamshire, (to the Prior whereof the lordship of the

town of Rotherham belonged) took advantage also to sweep away the revenues of Rotherham College, (which, according to a rental that I have seen, amounted to about 2000*l.* per annum) and after a while (having ingratiated himself with some townsmen and gentlemen thereabout by erecting a cockpit,) he removed the school out of the college into a sorry house before the gate, leaving it destitute of any allowance, till Mr. West (who wrote the *Precedents*) in the time of Queen Elizabeth, (and when Mr. Snall was schoolmaster,) obtained a yearly salary of ten pounds per annum, which is since paid out of the Exchequer, by the auditor of accounts. I remember how often and earnestly Mr. Francis West, who had been clerk to his uncle, would declaim against the injury done to that school, which indeed (as he said) ought still to have been kept in the college, and how when I was a schoolmaster there, he gave me a copy of the foundation, and showed me some rentals of lands, and told me where many deeds and evidences belonging thereunto were then concealed, and other remarkable passages, which he was loth to have buried in silence.

But I only mention thus much touching that worthy foundation, to show how charitably some men have been addicted to cherish the roots of learning, and how covetously others have been bent to destroy the whole body of it, even in former ages. And I hope none will be discouraged from pious undertakings, for fear lest his benevolence should in these or after times be perverted, when he considereth that God looketh upon the sincerity of his ends, and will accordingly reward him, though what he religiously intended may unhappily be abused by others, contrary to his mind.

I shall now, to end this chapter, recite some remarkable passages of Mr. Mulcaster's out of his *Positions* (ch. 40,) which I leave to the consideration of others to think how far they concur with what I have said, as well concerning the foundation of a petty as of a grammar school.

"If any well disposed wealthy man, for the honor that he beareth to the murdered infants, (as all our erections have some respect that way) would begin some building even for the little young ones which were no increase to schools, but a help to the elementary degree, they all would pray for him, and he himself should be bound to the memory of the young infants which put him in remembrance of so virtuous an act.

"The opportunity of the place, and the commodity of able trainers, whereof a small time will bring forth a great many, will draw many on, and procure good exhibitors to have the thing go forward.

"I could wish we had fewer schools, so they were more sufficient, and that upon consideration of the most convenient seats for the counties and shires, there were many put together, to make some few good.

"The use of under-teachers is not as we now practice it in schools, where indeed ushers be masters of themselves, but to assist the master in the easier points of his charge, who ought to have all under his own teaching for the chief points, and the same under the usher's for the more usual and easy."

II.—*How the Master should maintain his authority amongst his Scholars.*

Authority is the true mother of all due order, which the master must be careful in every thing to maintain, otherwise he may command what he pleaseth, but withal he must give the scholars liberty to do what they list. Which what an horrible confusion in their places, what insufferable neglect of their tasks,

what unruliness in point of behavior, what perpetual torment to the painful master and his ushers, and what unavoidable disgrace it bringeth upon a school, let them that are actors or spectators thereof give testimony. That therefore the master may have all his lawful commands put in execution with due alacrity, and his decent orders diligently observed, I conceive it requisite that,

1. He be sure in all things to behave as a master over himself, not only by refraining from those enormities and grosser faults which may render him scandalous to every one, but checking his own passions, especially that of anger; and if at any time he seem to have cause to be provoked to it, and feel it to come too violently upon him, let him rather walk aside awhile out of the school to divert it, than express it openly amongst his scholars by unseemly words or gestures. He should indeed endeavor to behave himself unblamably in all Christian-like conversation before all men, but so amongst his scholars that they may have much wherein to imitate him, but nothing whereby to disgrace him. And towards his neighbors his affability should be such as to win their love and respect, so that they may be ready at all times to countenance the master's well-doing, and to vindicate the credit of him and his school when they hear it unjustly traduced.

2. When he commands or forbids any thing to be done, he should acquaint his scholars with the end intended, and the benefits or inconveniences which attend such or such a course. For children have so much use of reason as to delight to hear persuasive arguments of reason, though the declivity of corrupt nature makes that they do not much mind them, where there is no fear of a rod for doing amiss. Yet sometimes it may be best to say only, "Do this," or "do it not," where you think it of no concernment to them to know the reason, and would make trial of their readiness to obey, without asking why or wherefore.

3. One main way to bring scholars to a loving and awful respect of their master, is for him to show himself at all times cheerful and pleasing towards them, and unwilling to punish them for every error, but withal to carry so close an eye upon all their behavior, that he can tell them privately, betwixt himself and them alone, of many faults they commit when they think he knows nothing, and let them see how he dare correct them for the like offenses when they presume to commit them again, and especially if they behave themselves stubbornly before their fellows. Yet to win a boy of a more stubborn spirit, it is better sometimes to forbear blows, when you have him submit to the rod, than to punish him so for a fault as to make him hate you, and out of a despite to you to do the like or a worse mischief. And when any general misdemeanor is committed, the master should show himself impartial towards all, so as either to pardon or punish all. But in inflicting punishments, as he should let none escape, so he should let the most untoward feel the most smart; but beware that he deal not rigorously, much less cruelly with any; for that will cause an utter dislike in all the scholars towards the master, fearing he will deal so with them in case they so offend, and thinking it to be no argument of love where severity of correction is used.

4. But nothing works more upon good-natured children than frequent encouragements and commendations for well-doing; and therefore when any task is performed or order observed according to his mind, the master should commend all his scholars, but especially the most observant, and encourage the weak and timorous, and admonish the most perverse amongst them to go on in

imitating their example, in hopes of finding as much favor at his hands as they see them to have.

5. In some places a master is apt to be molested with the reproachful clamors of the meaner sort of people, who can not (for the most part) endure to have their children corrected, be the fault never so heinous, but presently they must come to the school to brave it out with him; which if they do, the master should there in a calm manner admonish them before all his scholars to cease their clamor, and to consider how rash they are to interrupt his business, and to blame him for doing that duty with which he is intrusted by themselves, and others their betters. But if they go about to raise scandalous reports upon him, he may do well to get two or three judicious neighbors to examine the matter, and to rebuke the parties for making so much ado upon little or no occasion. Thus we shall see scholars abundantly more to respect the master when they know how grossly he is apt to be wronged by inconsiderate persons, and that wise men are ready to vindicate his cause. Whereas if they once see their master liable to every body's censure, and no man take his part whatever is said of him, they themselves will not care what tales they make to his utter disgrace or ruin; especially if he have been any whit harsh towards them, and they be desirous to outstrip the reins of his teaching and government.

III.—Of School times. Of Scholars going forth from the School, and of Play-days.

Though in many schools I observe six o'clock in the morning to be the hour for children to be fast at their books, yet in most, seven is the constant time, both in winter and summer, against which hour it is fit that every scholar should be ready at the school. And all they that come before seven should be permitted to play about the school till the clock strike, on condition that they can say their parts at the master's coming in; else they are not to play at all, but to settle to their books as soon as they come.

But here the master is to take heed that he be neither too rigorous with those of weaker age or constitution for coming somewhat tardy, nor indulgent toward those who through manifest sloth and frequent loitering, neglect the hour. For in the one it will breed a daily timorousness, and in the other it will make way to licentiousness; and on the one side parents will clamor, on the other side the school will receive disgrace. However, it is best to be as strict as possibly may be, in seeing that every scholar come at the just hour, and to note it as a punishable fault in him that cometh late, except he bring a note of excuse from his parent's or host's hand, and a promise withal that he shall not often offend in that kind.

It is not amiss for every scholar in every form to put down his name in a book (kept common for that purpose) so soon as he comes to school every day, that it may be upon record whether he used to come with the foremost or the hindmost, and how often he was absent from the school; likewise every scholar's name should be called over according to the bill every school hour, and they that are present should answer for themselves by saying *adsum*, and his next fellow should give notice of him that is absent, by saying *abest*.

The common time of dismissing scholars from school in the forenoon is eleven o'clock every day, and in the afternoon, on Mondays, Wednesdays and Fridays, five o'clock, but on Tuesday afternoons, four; and on Thursdays, three. Touch-

ing which, care should be taken that the tasks of every form may be fully dispatched rather a little before those hours than after; that then the scholars which intend writing or ciphering, or the like, may go to the writing school, as they yet use to do about London. Neither would I have the scholars to be so precisely observant of the clock as just upon the first stroke of it to rush out of the school; but notice being given to the master that it is stricken, and he having given the word for dismissing the school, all the scholars should come one by one orderly out of their seats according to their forms (the lowest beginning first, because they are commonly next the door,) and salute him with their hats in their hands, and so quietly depart out of the school without thrusting, or striving one to get out before another. It were good if there were hour-glasses in the school, to give notice how the time goes on.

And for their readily going home, or to the writing school, there should be private monitors appointed to inform the master, so soon as they return to the school again, who they are that neglected their duty therein.

That space of intermission, about nine and three o'clock, which is used at Westminster School and some others, and is so much commended by Mr. Brinsley (chap. 33 of his *Grammar School*), can not so well be observed, nor is it so requisite in those schools in which scholars meet not till seven in the morning; for the variety of their several tasks will take away that tediousness that seems to occur by the length of time, and those subsidiary books provided for the lower forms will prevent the over-toiling of themselves by their present work. And that those disorders which usually befall in scholars running forth in school-time may be somewhat remedied, this or the like course may be taken:

1. Let it not be lawful for above one boy in twenty to go forth at once; and at his going forth, let every one come to the master, or that usher to whose charge he belongs, and in his hearing repeat four or six vocabulas or phrases which he hath not said before, and then lay down his book, with his name written in it in a place appointed within the master's view, so that it may be known at once both how many and who are out of doors, and how long they tarry abroad. At their coming in, they should again repeat the like number of vocabulas and phrases as they did at their going forth.

The master would do well now and then to send a private spy, who may truly observe and certify him how every scholar spendeth his time abroad, and if any be found to go forth upon no occasion or to truant it without doors, let him be censured or reprov'd according to his demerits.

2. The granting of a playday is to be referred wholly to the discretion of the master, who must in this be as fearful to work his scholars' hindrance and the school's discredit, as willing by such a courtesy to gratify his deserving friends; who, if they be any whit reasonable, will be easily satisfied with a just excuse of denial; but if they be unreasonably importunate, they ought to be served with as unreasonable a nay-say; so that playdays should be rarely granted, except to such as may seem to claim more than ordinary interest in the school, and to whom the master is bound to show his due respects, especially before his scholars.

In places of great resort, and where often solicitation is made for play (especially by mothers who come to visit their children which are tabled at school,) it were good that a portion of an afternoon were designed constantly beforehand, on which (in case any suit should be made) the scholars might have leave

to play; but if not, that they be held to their books. Yet if there hath not a playday been granted, nor a holyday intervened for some weeks together, the master may of himself propound to his scholars that in case they perform all their tasks very well and orderly, so as to dispatch them by such an hour on such a day, they shall play the remainder thereof, and then (as at other times also when a playday is intended) one of the upper form (at least) should make a petitioning oration to the master or them that come to crave play; and another, a congratulatory speech, after leave is obtained.

Where both Thursdays and Saturdays in the afternoon are half holydays, I think Tuesdays the fittest on which to grant play; in other places, Thursdays may seem the best. But this I leave to the discretion of the master, who knoweth what is most convenient for his own school.

Now in granting a playday these directions may be useful:

1. That there be never more than one playday granted in one week, and that only when there is no holyday in that week, and when the weather also is clear and open, and the ground somewhat dry.

2. That no play be granted till one o'clock (at the soonest) when all the scholars are met and orations have been said.

3. That all the scholars be dismissed orderly into some close (or other place appointed for such a purpose) near the school, where they may play together, and use such honest and harmless recreations as may moderately exercise their bodies and not at all endanger their health.

And because some boys are apt to sneak home, or straggle from the rest of their fellows out of the bounds prescribed them to play in, you may do well to give order to him that hath the bill of all the names, to call it over at any time amid their sport, and to take notice of all such as have absented themselves, and to give you an account of them when they return into the school, which should be upon playdays before five o'clock, that they may bless God for his provident hand over them that day, and so go home. And that the master may sometimes see into various dispositions of children, which doth freely discover itself by their company and behavior at play, he may now and then take occasion to walk at a distance from them, or (if he come nearer) to stand out of their sight, so that he may behold them in the throng of their recreations and observe their gestures and words, which if in any thing they be not as becometh them, he may afterwards admonish them in private to behave or speak otherwise.

But an especial care must be taken and a charge accordingly often given, that your scholars do at no time play with any but their own school-fellows or other ingenuous children about home, which their parents or friends know, and whom they are willing should be admitted into their company; for besides the evil which may be contracted by learning corrupt discourse and imitating them in many shrewd turns, boys that are under little or no command will be very subject to babble and fight with scholars, and the rather because they know the master will not allow his scholars at all to quarrel, and if they can do them any maim, they will attempt it, that the master may have occasion to call them to account for it. So perverse is our corrupt nature (especially) where education hath no sway.

IV.—*Of Admission of Scholars; of Election of Forms; and of scholars' orderly sitting and demeanor in their seats when they are at school.*

1. No children should (as I have formerly said) be admitted into a grammar

school but such as can readily read English and write a legible hand, or at least be willing to learn to write, and to proceed in learning Latin. And it is therefore best to try, in the presence of their parents or friends that bring them, what they can do, by causing them to read or write (if they can) before them, that themselves may be judges of their present strength or weakness, and expect proficiency from them according as they see their capacity, not hastening them on too fast and rating at them daily, because (perhaps) in their judgment they do not learn so well as their neighbors' children.

The best is to admit of young beginners only once every year, and then to take in all that can be gotten from the petty schools, for company will encourage children to adventure upon an untried course of learning, seeing the more the merrier; and any discreet parent will be easily persuaded to forbear his son a while when he considereth that it will be more for his profiting to have company along with him as he learneth, and he may be daily bettered in reading English, and forwarded by learning to write, before he come from the petty school.

The fittest season of the year for such a general admission of little ones into the grammar school, doth seem to be about Easter; partly because the higher boys are usually then disposed of to trades or the universities, and partly because most children are then removed from one school to another, as having the summer coming on for their encouragement.

When you have thus admitted a company of boys together, you may let those who can read best obtain the higher places, till they come to get the rudiments of Latin without book, and then you may rank them into a form. Because,

2. It is a main help to the master and a furtherance to all the scholars, that the whole school be reduced into forms, and those also as few as may be, respecting the different years and capacity of each scholar. And if there were six hundred scholars or more in a school, they might all fitly be ranked into six forms, by putting those of equal age and abilities together, and the toil in hearing parts or lessons, and perusing exercises, (as I will show anon) would not be much more with a hundred orderly placed and well behaved in a room to themselves apart, than with three or four single boys in several employments. Not only because the master or ushers do thus at once impart themselves to all alike, and may bestow more time amongst them in examining any task; but also because by this means emulation (as a main quickener of diligence) will be wrought amongst them, insomuch that the weakest scholar amongst them will be loth to lag always behind the rest; and there is none so stupidly blockish but by help of company will learn that which he would not obtain alone, and I have seen the very hindmost oftentimes help all his fellows at a dead lift. The teacher's constant care should be, in every form, so to direct and examine every particular boy, so to help forward the weakest, that in every thing he doth, he may understand himself, and it is not to be said with what alacrity they will all strive to outdo one another, so that sometimes he that cometh behind all the rest will be as fit to make a leader of the form as those that are the foremost in it.

To provoke them all therefore to emulation, and that none may complain or think himself injured by being left behind, use constantly once at the end of a month, and when all your scholars are together, to make a free new choice in every form, after this manner:

1. Let every scholar in the form give his own voice concerning which boy he

thinketh to be the best proficient, and ablest for the present to lead the company; and having set him aside, let them all pass their voices again concerning whom they judge fittest to stand the next to him.

2. Then set these two opposite one to another, so that the better scholar may take the leading of the upper side, on your right hand, and the other the leading of the lower side on your left hand.

3. And that there may not be much inequality in the sides, let the lower leader have the first call, and liberty to take what boy he thinketh the strongest out of all the rest, and then let the higher leader have the next call, and liberty to take whom he liketh; and so let them proceed to call by course till they have (like ball players) ranked all their fellows to their sides, and so strongly and evenly set themselves in a posture one side against another, that it may be hard for any one to judge which is the stronger.

By thus choosing amongst themselves, they will all be so well pleased, that the master shall never be blamed for endeavoring to prefer one boy before another, or keeping any back that would seem to go faster than his fellows at his book. And indeed I have sometimes admired to observe the impartiality and judgment of children in placing one another according to their abilities and parts, waiving all other by-respects by which men would be inclined to set one higher and another lower. Yet if sometimes they seem to mistake in their judgment concerning a boy that is but newly come amongst them, or to be too partial against any other upon some general spleen, which is but very rare; the discreet master may, after the election, correct the error by giving such a one a place to his own liking, which he may keep till the next choice, except some of his inferiors have a list to dispute with him for his place, and then he must put it to the hazard, having a lawful time given him to provide beforehand for the contest.

4. Let all the scholars take their places in the school according to their several forms, and let every one sit in his form in that order in which he was elected. It were good that the seats were so equally set on both sides of the school, that the higher side of each form might keep the higher side of the school, I mean that on the master's right hand; and the lower side of the form the lower side of the school, which is that on the master's left hand. However, let the upper side take always the upper, and the lower the lower seats.

This placing of scholars in an opposite manner, side against side, is good in many respects, as,

1. To know on a sudden who is unruly in or absent out of his place.
2. To have them ready paired at all times for examinations, disputations, orations, or the like.
3. To keep order in going in and out of their seats to say, or in going home from school, or the like.

4. To increase courage in the scholars, who are delighted to let their friends see what place they keep amongst the rest, when they come to visit them.

As they sit in their seats, be sure to keep them continually employed, by proportioning every task to the time and their strength, with respect to the capacity of the weakest; for by this means the strongest boys will have more leisure to help and see that the weakest can do their work, for which purpose they should be appointed sometimes to sit in the middle amongst the rest, that they may more readily be consulted with and heard of all. These should sometimes construe and sometimes examine over their lessons, having their grammars and

dictionaries and other subsidiary books to help them, out of which they should appoint others to find what they inquire after; and this will be so far from hindering their own progress, that it will encourage them to go faster onward when they see how readily they can lead the way and incite their fellows to follow after them.

When in getting lessons the whole form shall be at a nonplus, let one of the leaders have recourse to the master or ushers, or to whom they shall appoint him to go for resolution. But I have found it a continual provoking of scholars to strive who should learn the fastest, to let both the sides of one form, as they sit apart, so to look to provide their lessons apart, and when they come to say parts or lessons, or to perform exercises, to bicker one with another, and propound those things to be resolved in by their opposites, which they observe the master to have omitted, and they think they can not tell. And let it be constantly noted which side hath the better all the week, that when afterwards they come to a general dispute at the week's end for places or sides, it may be considered.

V.—Of saying Parts and Lessons, and of perusing translations and all other kinds of exercises.

1. The best time for saying grammar parts or the like is the morning, partly because the memory is then the freshest, and partly because children may take the opportunity over night to get them perfectly at home. But forasmuch as vocabulars are more easy to be impressed on the mind, and require less pains in getting, I conceive it not amiss that children be continually exercised in saying them for afternoon parts at one o'clock, before which hour they may prepare themselves aforehand (even) amid their play.

After parts said, the master or his ushers should immediately give lessons to every form, or appoint a boy out of an upper form to give lessons to that which is next below him, in his hearing; which he should distinctly construe once or twice over, and note out all the words wherein the most difficulty of parsing seems to lie, and name the tropes and figures, the phrases and other elegances that are to be found (especially) in higher authors.

The lessons should be got ready to be said against ten o'clock in the forenoon and four in the afternoon, at which time the scholars should all come orderly and quietly out of their form, and taking their places where they ought to stand, (so as one side may be opposite to another,) they should all make their salutes, and then say one after another, except they be appointed otherwise.

For sometimes when you have occasion to make more hasty dispatch with a form, you may cause any one or more to say the whole lesson or by pieces; but be sure that they all come very well provided, and that every one be intent upon what another is saying, for which purpose you may note him that hath been most negligent in his seat, and ask him ever and anon what it was that his fellow said last.

To save your own lungs in asking many questions and telling rules or the like, you may let every two boys examine one another, and yourself only help them when they are both at a mistake.

You may easily amend that common and troublesome fault of indistinct and muttering speaking, by calling out a bold spirited little boy that can speak with grace, and encouraging him to give the other a higher note for the elevation of

his voice; for this will at last force the boy you are troubled with to speak louder and with a better grace, and to strive to pronounce his words more distinctly than the other did before him.

After lessons are ended, you may let every one propound what questions he pleaseth for his opposite to answer, and this will be a means to whet them on to more diligence in getting them before they come to say.

In the three lowest forms, or in others where all have the same translations or dictates, you may cause only him whose performance you most doubt of, to read what he hath written both in English and Latin, and help him, as you find his error, to correct it, and see that all the rest amend their own faults accordingly. Afterwards you may let one parse it both in English and Latin, and order them all to write it over again fairly in a paper book for themselves, and to give you also a copy of it neatly written in a loose paper every Saturday. And thus you shall have every one begin to lean on his own strength, a thing very necessary in all kinds of exercises, though they do the less. If you once take notice of any boy's strength, you may easily judge of what he bringeth, whether it be his own or another's doing.

But in the upper forms, and where they have all several exercises, it is necessary that you peruse what every scholar hath done. And for this work you may set apart Saturday forenoons, after grammatical examinations are ended, and before they say their catechisms. And that they may write them fair, you should sometimes compare them with their copy-books or such pieces as they wrote last at the writing school. Before they bring them to you to read, let them peruse one another's exercise amongst themselves, and try what faults they can find in it; and as you read them over, where you see a gross mistake, explode it; where you espy any oversight, note it with a dash, that they may amend it; but where you see any fault which is beyond their power to avoid or remedy, do you mildly correct it for them, and advise them to observe it for the future. However, forget not to commend him most that hath done the best, and for his encouragement to make him read over his exercise aloud, that others may hear it, and then to hang it up in an eminent place, that they may imitate it; and if any one can afterwards outdo it, let his exercise be hanged up in its stead. But if any one hath lazily performed his exercise, so that it be worse than all the rest, let it be cut in the fashion of a leg, and be hanged up by the heel till he make a better, and deserve that that may be taken down. It is not amiss also, to stir them up to more diligence, to have a common paper book wherein the names of all in every form that have *optimè* and *pessimè* performed their weekly exercises may be written, and that the one may have the privilege to beg a playday once a month or to obtain pardon for some of his fellows, and the other may be confined to some task when a playday is granted.

VI.—Of weekly Repetitions. Of Grammatical Examinations and Disputations. Of collecting phrases and gathering into commonplace-books. Of pronouncing orations and declamations.

I have not in either of the foregoing treatises made mention of any thing to be done on Fridays, because that day is commonly spent in most schools in repeating what hath been learned in the foregoing part of the week; which custom, because it is a means to confirm children's memories in what they learn, I willingly conform unto.

After chapters therefore read in a morning, let them repeat their wonted parts and afterwards their lessons, all which they will be able to say together out of their several authors, so that some be made to repeat out of one book and some out of another.

For if due care be but had aforehand that scholars be very ready and perfect in their daily tasks, it will take away all toil and timorousness which usually attend these repetitions, and make that this day will become the veriest play-day in all the week; when boys shall see that they have nothing to do but what they can do already, (at least) with a little looking of it over on Thursdays towards evening at home. What they have translated out of any author in prose should be read out of English into Latin, and what they learn in poets should be said (as well as can be) by heart, both for the verse and the matter's sake, which will furnish them with authorities and sharpen their invention for versifying.

After repetitions ended, the master should note all the phrases and sentences, and other things observable in their lessons, which they should transcribe into phrase-books and commonplace-books, for their constant use in writing or speaking or making exercises, as we have mentioned already before.

And because the most leisure is gained on Friday afternoons, it will not be amiss about three o'clock to let every form dispute side with side, one after another, after this manner:

1. Let every one propound to his opposite two or three questions which he thinks most difficult out of his week's work, which if the other can not answer readily before he count six, or ten in Latin, let him be *captus*, and the questions be propounded to his next fellow. The lowest in the form may begin the dispute, and so go on to the highest on either side, who should keep reckoning of those that are capt, and how often.

2. Besides their week's work, they may try who can most perfectly repeat *memoriter* a part of the grammar, or any author which they read, or who can recite the most vocabulas under one head, or who can vary a phrase the best, or imitate any piece of an orator or poet.

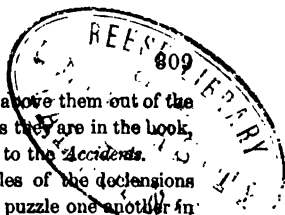
3. Some time should also be spent in capping Latin verses amongst the lower forms, and Greek verses amongst the highest, for which they may provide themselves out of a *Capping-book*, which seems to be made on purpose by Bartholomæus Schonborn, or *Gnomologicon Poeticum*, made lately by Mr. Rossee, besides which they may contrive a little book of their own wherein to write verses alphabetically out of the best poets.

Let that side which appeareth to be the victor have the upper seat in the school till a new choice be made, except the other can win it from them before and bring them back with a hissing disgrace.

Amid these disputes the master must have a great care to suppress noise and tumultuous clamor, and see that no boy stirs out of his appointed place. For they are apt to heighten their spirits beyond moderation if the master's discretion do not settle them.

Let it now be lawful for any lower boy in a form to dispute with one above him for his place. Mr. Stockwood's *Disputations* will be helpful to the upper scholars.

Now that all your scholars may be thoroughly grounded in their grammar, so as not to be apt to forget what they have learnt in it, let them all be exercised in the examination of a part of it every Saturday morning, thus:



1. Let the first and lowest form examine the two next above them out of the examination of the *Accidents*, asking them the questions as they are in the book, and causing them to answer without book, and according to the *Accidents*.

2. Then let all those three forms run over the examples of the declensions and conjugations, as I formerly showed, and try who can puzzle one another in declining any hard noun or conjugating and forming any verb, and give the rule of the genders of the one, or preterperfect tense or supine of the other. When these have done,

3. Let the fourth form examine the two highest forms in *Examinatio Latina Grammatica*, and sometimes in *Elementa Rhetorices*, and then

4. Let all these three forms run over the paradigms of the Greek declensions and conjugations.

5. Afterwards the two upper forms may bicker with one another touching grammar niceties, either Latin or Greek, which they have taken notice of and collected into a commonplace-book, as I mentioned before. But a principal care must be had to bring all your scholars to a habit of speaking Latin, and therefore a strict law should be made and observed, that every scholar (especially after he hath been one-quarter of a year at school) should either learn to speak in Latin or be forced to hold his tongue. And to help the little ones in so doing, besides those *Phrasiuncula* at the end of the *Grounds of Grammar*, they should have *Formula loquendi quotidiana*, such expressions as are every day used (especially about the school) written down in a little book, that they may get them by heart at by-times. As for the other boys, they will be better guided how to speak by the rules of grammar and the constant use and imitation of approved authors. I conceive the penury of proper words and good phrase with many teachers, is a main reason why children are not as well trained up to speak Latin in England as they are in many places beyond seas, and the ready and frequent use of their mother tongue causeth that they are hardly reclaimed from it to make use of another language. Whereas if whilst they are at the school, they might hear little or no English spoken, nor be suffered to speak it, they would quickly conform themselves to discourse in Latin; as I have known French boys that understood not a word in English, to be able in two or three months to talk it as readily as they that were English born. Only at the first one must wink at their improprieties and harshness in the pronunciation of some words and phrases, and take their meaning by what they speak, and after a while by custom and imitation of others, they will speak in Latin as properly as the best, especially after they have gained the knowledge of grammar, and accustomed themselves to observe the style of Latin authors.

No day in the week should pass on which some declamation, oration or theme should not be pronounced, about a quarter of an hour before the school be broken up, and after lessons are all ended in the forenoon; that by assiduity in these exercises, the scholars may be emboldened to perform them with grace before whomsoever, and upon occasion of any solemnity or coming of friends into the school. There should be two standing desks set opposite in the midst of the school, for boys to stand at when they pronounce.

VII.—Of exercising scholars in the Scriptures. Of using daily prayers and singing psalms. Of taking notes at sermons, and examination after sermons.

1. Besides that course which we have prescribed before to every form, of

reading part of a Latin or Greek chapter before parts, it is necessary for children's more profiting in the Scriptures to cause that an English chapter be read every morning at the beginning, and every night at the giving over teaching. And in this every boy throughout the school should take his turn, that it may be known how perfect he is in reading English readily and distinctly. Let him that is to read take his place at a desk in the middle of the school, and be sure he speak aloud, and let every one reverently attend to what is read, the lower boys looking upon their English and the higher upon their Latin Bibles. Those also that are able to make use of the *Septuagint* in Greek, may do well to procure them to look upon, especially seeing they are now to be had at a far cheaper rate than formerly, being but lately printed. When the chapter is ended, you may demand of one in each form what he observed, and let any one that is disposed take the liberty to ask his opposite a question or two concerning some passage in it. Mr. Paget's *History of the Bible* will assist them herein, so they look upon it before the chapter be read; you yourself may do well sometimes to tell them what things are most remarkable in that present chapter. The scholars of the upper forms may do well to carry *Memoriale Biblicum* constantly in their pocket, by which they may be put in mind at all times what passages they may find in any chapter.

2. After the chapter is ended, they may sing the first, threescore and second, the hundredth, or hundred and thirteenth Psalm in Latin out of a little book formerly printed at Oxford, which one of the head scholars should distinctly read unto them.

3. When the psalm is done, the same scholar should repeat those admonitions at the end of *Nowel's Catechism*, and then the whole school should rehearse those hymns which are there, the higher side of the school saying one verse, and the lower the next, *alternatum et conjunctis vocibus*; and at last conclude with one of those prayers for a blessing upon your endeavors.

These prayers and psalms should be all written together both in English and Latin in a little book, which would be necessary to be kept in the school, for continual and daily use.

Some course should be taken that the master may have notice what scholars omit the reading of a chapter at home every night after supper; but for this pious exercise (I hope) every Christian parent will be ready to call upon and encourage their own children, or others that are under their charge as tablers.

Now that the good schoolmaster may more fully discharge his duty towards God and his Church, (who have both intrusted him with the education of their children,) to nurture and bring them up in the fear of the Lord, it were expedient, if a course could be taken, that he might meet them all at the school every Lord's day in the morning, about an hour before church time, where he may take the opportunity to instruct them in catechetical doctrines, according to what he may read in many excellent books that are as expositions of the Lord's Prayer, the Creed, and the Ten Commandments, and not wile it in a tedious, unmethodized discourse concerning things unnecessary to be taken notice of, and unmeet for children to be puzzled with. And after a psalm sung, and a prayer said, he may see them go all before him orderly by two and two to the church, where it is requisite that they should have a convenient place appointed to sit in together by themselves, and all within the master's view. This would be an especial means to prevent that unreverent behaviour in the

church which is too usual amongst scholars, when they are glad to wander into by-corners to sit down to rest (or rather chat) in, or are ever and anon molested with quarrelsome lads or unmannerly fellows, that are apt to disquiet them and thrust them out of their places. I have heretofore observed how the ninth canon of our Church religiously enjoins every schoolmaster to see his scholars quietly and soberly behave themselves in the church, and examine them at times convenient after their return, what they have borne away of any sermon, which he can not well do except he have them all confined to one place, where himself may sit near them.

After church time ended in the afternoon, the master may do well to see all his scholars go before him in like order to the school, where he should examine them, what they have heard or written at the sermon. Now in repeating sermons this course may be taken:

1. Let every one of the lower scholars repeat the text, or a proof, or some little pious sentence which was then delivered. And these he should get either by his own attention at the church, or by the help of his fellows afterwards. For there should be no stir made in the church, upon pretense of getting notes there.

2. Those in the four middlemost forms should mind to write the text, doctrines, reasons, uses, motives, and directions, with the quotations of Scripture places, as they are best able.

3. Those in the highest form should strive to write as much and in as good order as possibly may be, yourself now and then hinting to them some direction what method they should observe in writing sermons, and that may digest what they have written into that order wherein they heard it delivered. Let them have a little time of respite amongst themselves, to compare their notes one with another, and to supply their defects and amend what they have mistaken. Then

4. You may first cause one of your higher scholars to read distinctly what he hath written, and afterwards two or three of other forms, whom you please to pick out; and last of all, let every one of the lowest form tell you what he hath observed of the sermon.

These things being orderly done, you may enlarge a little upon what point you think most necessary for them to remember and practice, and conclude this holy day's exercise with the singing of a psalm and devout prayers, and charging your scholars to spend the rest of the time in reading the Scriptures and such religious books as tend to their farther profiting in Christian piety, you may comfortably dismiss them to their several homes, and expect God's blessing upon your endeavors for the week following.

VIII.—*Of the Monitor's Bill; and of rewards and punishments in a Grammar School.*

That no disorder or vice committed either at school, church, or elsewhere, may pass unnoted by the master, he may cause his scholars in the two upper forms to play the monitor in their weekly turns, from Friday to Friday.

They may make one bill to serve for all the week, proportionable to the number of scholars of every form, after this manner: [*e. g., First Form.*]

Novemb. 1659.		F.	S.	S.	M.	T.	W.	Th.
1.	G. C.		.					
	J. O.		.					
	T. P.						..	

Wherein you see the letters above denoting the days of the week, the letters on the side show the place where every scholar's name should be written, and the pricks within the lines, how every default may easily be marked with a pin or a pen. So that,

1. This bill may serve as a catalogue to be called over every day at school hours to know who are absent, and may save a deal of trouble in making little notes of scholars' frequent misdemeanors.

2. If you cause every bill to be dated, and keep them by you, you may know at any time who is the shrewdest or most orderly boy amongst the rest, and give public notice accordingly, that the one may be admonished to amend his manners, and the other encouraged to go on in well doing.

3. Besides, it will work the greater awe among all the scholars, when they shall know that every fault they commit whilst they are at the school will be upon record, though the master doth never punish it.

4. You shall find it a means of much ease to yourself when you shall need only to bid the monitor take notice of a neglect or fault committed, and let it so remain till some fitter opportunity or just occasion invite or (rather) enforce you to call to a reckoning.

5. For when you perceive any general disorder, or some gross thing is done which ought not to escape correction, you may call for the bill, and then censure those only for example whom you find to be most often and notoriously peccant, suffering the rest (that you called forth) to escape with an admonition to beware for the future.

Thus you shall gain your scholars' affections when they shall see you unwilling to punish any without great cause, and avoid that common outcry which is wont to be made against a schoolmaster, upon report of a multitude of boys being whipped at once.

6. So many marks as are found upon any boy's name may be said to deserve so many jerks; but herein much discretion is to be used, that you seem not too severe nor prove too partial. You may sometimes tell your scholars what faults deserve more or fewer marks, as idleness one, wandering forth one, fighting three, swearing four, or the like; which are to be noted in the bill more or less, according to the nature of the faults themselves.

He that is public monitor in one of the two highest forms may appoint two private monitors to himself in every other form, who may give him secret information of every misdemeanor committed in any place; and this will be an especial means to keep all in very good order, with seldom and moderate correction, a thing to be desired by every schoolmaster for his own ease and his scholars' better encouragement.

Those scholars in every form which are indeed the most studious and diligent in their tasks and constantly observant to keep good order, should often be commended to their fellows as patterns for them to imitate; and when any one hath performed any task or exercise better than ordinary, he should receive some

small gift at his master's hand, as a new penknife or a paper book, or the like signal testimony of the master's approbation of what he hath done. Those parents which are of more ability may do well to allow the master a small sum of money to reward their sons' diligence now and then, and to excite them to the better performance of their tasks and exercises, which will invite them to go faster on in learning than a rod can drive them.

As for inflicting punishments even upon the meanest and worst of children, it should ever be the most unwilling piece of work that a master can take in hand; and therefore he should not be hasty to punish any fault whereof the scholar hath not been premonished, except it be such a notorious crime as a boy can not but know beforehand that he ought not to have done it. As for the ferula, I wish (and as I have already done) for many reasons, which it is needless to commit to paper, that it might be utterly banished out of all schools. A good sharp birchen rod, and free from knots, (for willow wands are insufferable, and fitter for a bedlam than a school) as it will break no bones nor endanger any limbs, so it will be sufficient wherewith to correct those that shall deserve it in the lower forms, and for the higher scholars that will not behave as they ought to do without blows, a good switch about their shoulders would (in Quintilian's judgment) seem fitter than a rod elsewhere; and his reason is so modestly agreeable to nature, that as I am loth to mention it, so I wonder that it hath not more prevailed with many discreet schoolmasters, who (I persuade myself) have often read it, and can not but approve of it as most Christian, however it dropped from a heathen's pen. But *Nobilis equus umbra virga regitur*. Ingenuous and towardly scholars will not need so much as the shadow of a rod. And towards others that seem to extort a rod from the master whether he will or not, and (as I may say) will enforce him to fight, he should generally use such clemency in his hand as not to exceed three lashes, in the laying on of which he may contribute more or less weight, with respect to the demerits of the fault. But of this he should always make sure, that he never let the offender go from him with a stubborn look or a stomachful gesture, much less with a squealing outcry or muttering to himself; all which may be easily taken off with another smart jerk or two; but you should rather let him stand aside a little, and see how his stomach will settle.

That a boy may at once know you dare adventure to whip him, and withal how little you delight in his skin, you may at some time when he hath cause to think that he hath well deserved a whipping, and when you have him ready for the rod, pass him over with an admonition to beware another time; and if he again be peccant in the same kind, you may give him more cause at present to remember both his faults together, and for the future to avoid them.

This even and indifferent carriage in rewards and punishments will make those scholars that have any ingenuity in them, less willing to offend, and incline the rest to behave more dutifully, because they see their master bear such a loving mind towards them all, and to be sharp in punishing none but those that know they well deserved what blows they had.

As for those boys that do slight good order, and are apt to stir up others to reject them (which are usually those of bigger stature) that perhaps have not been acquainted with your teaching or government, or know they shall shortly remove from under your command, or those that without any cause love to truant it abroad, or by other licentious demeanor bring disgrace to your school

or offer any affront to yourself, I conceive your best way is (at a fitting opportunity) to send for their parents or friends, with one or two judicious neighbors to be by (where there are no governors of the school) and let them justly know the fault, and adjudge what punishment such a boy deserveth; but if the parents be unwilling to have him corrected for his peremptory disorders, choose rather to send him home with them than retain him any longer, to the disturbance of the school or your own unquiet. This you shall find as an especial remedy to prevent such clamorous outcries of supposed tyranny, when every jerk that is given to a notorious unhappy boy for his insolent misbehavior shall chance to be multiplied in the relating, (like Scoggins' crows,) from three to thirty; which base obloquy and misreport, what hindrance it bringeth to the flourishing of a school, and what unseemly disgrace to a worthy master, I need not mention.

But because such boys as these sometimes are apt to take it as an argument of the master's pusillanimity thus to send for their parents, who generally do not love to hear of their children's faults, the master may take an occasion, where he sees admonitions will not prevail, to watch them more strictly at every turn, and having found them to have committed some gross enormity, to chastise them more smartly than ordinarily, yet so as to show no rigor. And if after that he perceive them willfully to rush into the same acts of lewdness, let him fairly turn them out of his school, and signify the cause to their friends; at whose entreaties he should never take them again, except they will engage to forfeit a sum of money to be bestowed in public books, in case they offend in that nature again.

As for the lesser sort of children, that are apt to reiterate the same fault too often, for which they have sometimes been already corrected, your surest way to reclaim them is, after you have once given them warning, to whip them for a fault, and if that will do no good, to double your strokes the second time; but if a third time they come under the rod and beg heartily for pardon, (as commonly then they will do, fearing lest their punishment should be tripled,) you should not let them pass, except they can procure two of your more orderly boys, or one that is in your favor for his constant well-doing, to give their words for them, and to engage to be whipped for them if ever they do the like. If you see they get sureties to your liking, you may let them escape so; but if they can not, you may adventure to take their own single words; and the care of their sureties, and fear to displease you again, will so work upon them that they will seldom or never do the like afterwards.

Such faults as are viciously enormous are to be duly punished with a rod, according as the obliquity of the will appeareth in them more or less; as for such as are committed for want of understanding, they are to be remedied by due instruction, but those that seem to offend through laziness and careless neglect should be abridged of desired liberty when others have leave to play. The shutting of children up for a while in a dark room, and depriving them of a meal's meat, or the like, (which are used in some tabling schools) as they are not of good report, so they can not be commendably or conveniently used in our greater schools.

But these things I leave to the discretion of every prudent master, who is able to judge of every particular action by its several circumstances, and to take such course as he sees best available for the orderly management of his own school, especially where he is not tied to any rules of government.

IX.—Of Scholars writing their Exercises fair, and of keeping their books handsome. And of erecting a School Library for the master's recreation therein, at vacant hours.

Though the teaching of children to write a fair hand doth properly belong to writing-masters, as professors of that art, yet the care of seeing that all they write in paper books and loose papers by way of exercises be neatly done, doth pertain to every schoolmaster; and therefore we shall here touch a little concerning that, and also show what heed is to be taken about keeping their books.

The usual way for scholars learning to write at the country grammar-schools, is to entertain an honest and skillful penman, that he may constantly come and continue with them about a month or six weeks together every year, in which time commonly every one may learn to write legibly. The best season for such a man's coming is about May-day, partly because the days are then pretty long, and partly because it will be requisite for such as are then getting their grammar rudiments, to learn to write before they come to translations. The parents of all other children should be advised to let them take that opportunity to improve their hands, forasmuch as the benefit thereof will far exceed the charge, and it will be a means of better order to have all employed together about a thing so necessary. The master of the school should often have an eye upon them, to see what they do and how they profit, and that they may not slack in their other learning, he may hear them a part at morn, and a lesson at noon before their copies be set or their books can be provided for them, and proportion their weekly exercises accordingly. And that the stock which they then get may be better increased against the next year, the penman should cause them to write a piece, a day or two before he leave them, as fair as they can, with the date above it, and their names subscribed underneath, which the schoolmaster may safely keep by him as a testimony of what they can perform, and take care to see that their writing for the future be not much worse. This pattern or copy I formerly received from that industrious penman, Mr. Roger Evans, who had sometimes taught me to write, being a scholar at Wakefield, and afterwards yearly taught my scholars whilst I was schoolmaster at Rotham.

June 1, 1635.

A man can not any way enter into the canonized rule to come to God's holy will and kingdom, except he reform, and become acquainted with virtuous manners, in most prudent sort that may be, &c.

ROGER EVANS.

But in London, (which of all places I know in England is best for the full improvement of children in their education, because of the variety of objects which daily present themselves to them, or may easily be seen once a year by walking to Mr. John Tradescant's, or the like houses or gardens where rarities are kept, a book of all which might deserve to be printed, as that ingenious gentleman hath lately done his by the name of *Museum Tradescantianum, a Collection of Rarities*; could parents at home but half so well look to their behaviour as the masters do to their learning at school,) it is ordinary for scholars at eleven and five o'clock to go to the writing schools, and there to benefit themselves in writing. In that city, therefore, having the opportunity of the neighborhood of my singular loving friend, Mr. James Hodder, (whose copy

books of late printed do sufficiently testify his ability for the profession he hath undertaken, and of whose care and pains I have had abundant trial by his profiting of my scholars for (at least) twelve years together, who had most of them learned of him to write a very fair hand, not to speak of arithmetic or merchants' accounts, which they gained also by his teaching at spare times,) in the Token-house garden in Lothbury, somewhat near the Old Exchange, I so ordered the business with him that all my lower scholars had their little paper books ruled, wherein they wrote their lessons fairly, and then their translations and other exercises in loose papers in his sight, until they were able of themselves to do every thing in a handsome manner. And afterwards it is not to be expressed what pleasure they took in writing and flourishing their exercises all the while they continued with me at the school. This or a better course (perhaps) may be taken at other schools where they have a writing-master constant and ready to attend them every day throughout the year, as I have heard Mr. Farnaby made use of Mr. Taylor, a famous penman, for the teaching of his scholars to write. If at any time a scholar doth not write his exercises in the fairest manner that he is able, his punishment may be to write them over again whilst others play. I have been told of a porter that could neither write nor read, who, if at any time he had seen his son write his exercises at home in a worse hand than he thought he was able to do, would tear them to pieces, and thus at last enforced the scholar upon a very good hand of writing; which rude kind of dealing with a child I would have no parents to imitate, yet I would advise them sometimes to look upon their children's writing at home, and to encourage them to do it in the neatest fashion. For as it will be an ornament to them in their learning and an especial furtherance of their studies or future employments elsewhere, so it will be a great ease to the master in the perusal of what they have written, I, with some others, have been sorry to see some of that reverend and learned Mr. Hooker's sermons come in manuscript to the press, and not to have been possible to be printed, because they were so scribblingly written that nobody could read three words together in them. It is commonly objected to the best scholars in any of the three professions, that they write the worst hands, and therefore I wish that care may be taken to prevent that objection at the school to a future generation.

Now to train up scholars as well in calligraphy as orthography, whilst they write their translations in a paper book, they should often be admonished,

1. To keep a large margin on both sides, and to leave the space of a long letter's length betwixt every line, and of a small letter's breadth betwixt every word, and to regard the proportion of every particular letter, and the difference betwixt *j* and *i*, and *v* and *u*, and above all to beware of blotting or soiling their books.

2. To make every comma, colon, semicolon, period, note of interrogation, parenthesis, and note of admiration, &c., in their due places.

3. To write all their words in an even line with the tops, bellies and bottoms of the letters of an even size, and when they have an occasion to divide any word, to part it by its just syllables, making this mark hyphen (-) at the end of the line. And

4. In Latin to give an adverb or other word its note of difference, and the like, as the grammar will further direct them. But for directions in fair writing, I refer him to that sheet which Mr. Hodder hath caused to be printed before his *Copybook*, which will sufficiently commend its author.

After they have once got a habit of these things, they will more easily observe them in future exercises, the neglect whereof will be harder to remedy afterwards, which I have seen too gross in some men's letters that have come from the universities.

As for books, a care should be first had to procure those of a fair print in good paper, and strongly bound; then the master may more easily see that his scholars keep them all safe and cleanly and free from scribbling or rending, by causing them at a time unexpected to bring all their books before him, and to show their names, together with a note of the price, fairly written in the middle of every one of them, as well as at the beginning or end. And that none may squander his own or pilfer away another's book, or have it carelessly thrown about, or to seek when he should use it, the master may do well to make every scholar once a quarter to deliver him a catalogue of his books, with the day of the month and his name subscribed, which he may lay by him, so as at any time to call him whom he suspecteth to be negligent of his books to a private and particular account of them. That the school may be furnished with all kinds of subsidiary books for the general use of all the scholars, (to be laid up in repositories or presses, as so many little libraries belonging to every form, and to be safely kept under lock and key,) whereof the head boy in each form should take the charge to deliver them out, and see that they be brought in every night without being abused; it would not be amiss that every scholar which is admitted into the school should give 12*d.* (besides what is accustomed to be paid to the master,) and every one at his removal into a new form should give 12*d.* likewise, towards the procuring of common books. The master also may do well to stir up his friends that come to visit the school, or especially such as prevail with him for a playday, to contribute somewhat towards the furtherance of children's learning, as well as to be earnestly importunate for that which may hinder it. But where a school is liberally endowed, it would be good that a considerable stock of money were appointed to be laid out yearly in all kinds of school books, whereby the poorer sort of children may have whereon to learn, and they and all other scholars wherewith to help themselves in their lessons and exercises.

And might I become a petitioner to the forementioned trustees for the maintenance of students, or any that are both willing and able to promote the growth of good learning, I should desire that towards the better completing of a grammar-school, there might be a little library well furnished with all sorts of grammars, phrase-books, lexicons, dictionaries, orators, poets, histories, herbals, commentators, scholiasts, antiquaries, critics, and some of the succinctest and choicest authors for matters of humanity, divinity, medicine and law; besides those which treat of every art and science, whether liberal or mechanical, that he that is employed as a professed schoolmaster may thoroughly stock himself with all kinds of learning, and be able to inform his scholars in anything that shall be necessary for them to know. For every new master can not at the first be provided with a good study of books for his own private use and his scholars' benefit, neither indeed at any time can he procure them without great trouble and charge, especially if he live at a place far distant from London. I have observed it therefore as a great point of discretion, as well as a matter of charity, in Mr. Calfé, that in founding his grammar-school at Lewinham, he provided a library for the master's use, as well as a house for him to dwell in.

And I took notice of that charitably disposed gentleman and citizen deputy Adams, that when he went about to erect a school in his native county of Shropshire (if I mistake not,) he consulted with Mr. Langley, and brought him along with him to Sion College, to see what books he judged most convenient to furnish a library withal for the schoolmaster's use, and I heard since that he bestowed (at least) 100*l.* in choice books for that purpose. I only mention these two worthy persons (the former whereof is dead, and the latter living in Lawrence Lane, London,) to let others see that in this present age of ours we want not patterns of well doing, if any be desirous to imitate them in their pious actions; and I hope God hath already inclined the hearts of many, as he hath given them store of riches, to endeavor to distribute and do good in this kind, even now whilst they live, in their generation.

I will conclude this chapter with that which I heard lately related of a cheap, easy, profiting, and pious work of charity which one did, in bestowing 40*s.* per annum towards buying English Bibles, which were to be given to those children in the parish that were best able to read in them; and I do verily believe that were an annual sum laid out in procuring a certain number of books for such as should best deserve them in every form at a free school, it would be a greater incitement to provoke children to learn, than any persuasions or enforcements which are commonly yet used.

X.—*Of Exclusion, and Breaking up School, and of Potations.*

I should here add something touching those usual customs which are yet on foot in most places, of scholars excluding or shutting out the master once a year, and capitulating with him about orders to be observed, or the like; but forasmuch as I see they differ very much, and are of late discontinued in many schools. I will only mention how they may be carried on, where they yet remain, without any contest or disturbance, till at last they die of themselves.

1. Therefore there should be no exclusion till after St. Andrew's day, and the master should know of it beforehand, that all things may be ordered handsomely to the credit of the school.

2. That at the time of exclusion, the scholars behave themselves merrily and civilly about the school, without injuring one another or making use of any weapons whereby to endanger themselves or do harm to any thing in the school.

3. That the heads of each form consult with their fellows what things they would desire of the master, and that they bring their suits to the highest scholar in the school, that he may prefer them to the master written fairly in Latin, to receive his approbation or dislike of them, in a mild way of arguing.

4. That the master do not molest or come amongst his scholars all the while they are drawing up their petition about school orders, nor trouble himself concerning them, more than to hear that they keep good rule.

5. That every scholar prepare all his exercises according to his form, to be ready to be hanged out before the school doors or windows (or rather to be hanged over his place within the school,) against the master's coming.

6. That the master, upon notice that all things are prepared for his coming, go quietly to the school, being accompanied by some of the scholars' parents, and after he have before witness subscribed to their petition at the door, to enter the school in a peaceable and loving manner, and receive from his scholars (and

also make to them) a short congratulatory oration, and so dismiss them to play.

By thus doing, a master shall both prevent his scholars behaving themselves against him in such a rude and tumultuous manner as hath formerly been used, and give them and their parents no occasion to grudge at him for seeming to take upon him too abruptly to break old use and custom, which, so long as it becometh an encouragement to their learning, may the better be indulged to young scholars, whilst no evil consequences attend it. It is yet a custom retained in some schools in the country for scholars to make a potation or general feast once a year (and that commonly before Shrovetide;) towards defraying the charge whereof, every one bringeth so much money as his parents think good to allow him, and giveth it to the master to be expended in a dinner orderly provided for them, or in some kind of banqueting manner, which children are commonly more delighted withal; and for this there needeth no further direction than to say that it concerneth the master at such times to be cheerful and free in the entertainment of his scholars (whether at his own house or elsewhere,) and to see that they keep such order and moderation (especially in drinking) that it may rather be a refreshment and encouragement to them (as it is indeed intended) than any occasion of distemper or debauched behavior amongst them. And after thanks given to God for his mercy towards them in that particular expression of joy and rejoicing one with another, the scholars should all go together into the fields to take a little more liberty of recreation than ordinary, yet with an especial regard had that they catch no cold or otherwise endanger their bodies.

In London and most other places, the usual manner remaineth of breaking up schools (for a time of intermission of studies and visiting of friends) about a week before Christmas, Easter, and Whitsuntide, till the week following those holy days begin, at which time every scholar bringeth something to the master as a token of his own and his parents' gratitude for his care and love towards him. Now that the master may also then testify his forwardness to requite their courtesies and encourage his scholars, he should, every breaking up day,

1. Provide some fitting collation to be imparted and distributed by himself to his scholars, who will thankfully take a small gift as a token of more singular favor at his hands than another's.

2. Invite his scholars' parents, together with such gentlemen and ministers as he is better acquainted withal, as well to take notice of what his scholars in every form are able to do, as to grace him with their company.

3. Let the scholars in each form be furnished with such exercises as belong to them, in loose papers, and have all their translations written fairly in their books, to be ready to show to any one that shall desire to look upon them. The higher forms should entertain the company with some elegant Latin comedy out of *Terence* or *Plautus*, and part of a Greek one out of *Aristophanes*, as also with such orations and declamations, and copies of several sorts of verses, as are most proper for celebrating the solemnity of the time at hand and to give satisfaction to the present meeting. The lesser boys should remain orderly in their forms, to be ready to give answer to any one that shall examine them in what they have learned, or would know what they are able to perform.

This, as it will be an encouragement to the scholars to go on cheerfully at their books, so will it be an endearment of their friends to the master, and a

means to preserve the credit of the school against all virulent aspersions that are apt causelessly and too often to be cast upon it by unworthy and illiterate persons.

It were necessary that such orders as you would have your scholars duly to observe, and the mulct to be undergone for every particular default, were fairly written in a table and hung up in some eminent place in the school, that every one may at any time take notice of them and learn more readily to conform to your discipline. I had thought here to have added another sheet or two concerning school orders and scholars' more decent behavior, but considering the present haste of the press in finishing the work, and fearing lest this little book should swell to too great a bulk, I choose rather to defer them till another opportunity. For whilst I intended only to give a few directions to the less experienced for the better ordering of grammar scholars, I have run over the greater part of the most considerable matters which concern the managing of a school; which a man that is constant to his employment, loving towards children, discreet in his behavior, a well-grounded scholar and a honest Christian, desirous to serve God cheerfully in the calling of a schoolmaster, may undoubtedly perform without any extraordinary toil or disturbance either of mind or body. God in mercy enable me and all that labor in this necessary profession, to persevere in our duty, whatever discouragements may seem to attend it.

XI.—*Of the Method of Teaching which was used in Rotherham School by Mr. Bonner, an experienced schoolmaster there, who was thence chosen to Chesterfield, where he died.*

That none may censure this discovery which I have made, to be an uncouth way of teaching, or contrary to what had been aforetime observed by my predecessors at Rotherham School (which is the same that most schoolmasters yet use,) I have hereto annexed their method, just as I received it from the mouth of some scholars who had been trained up therein all their time at that school, and thence sent to the university. Before I came thither to be master, the custom was,

1. To enter boys at the school one by one, as they were fit for the *Accidents*, and to let them proceed therein severally till so many others came to them as were fit to be ranked with them in a form. These were first put to read the *Accidents*, and afterwards made to commit it to memory; when they had done which, they were exercised in construing and parsing the examples in the English rules, and this was called the first form: of which it was required to say four lessons a day, but of the other forms, a part and a lesson in the forenoon, and a lesson only in the afternoon.

2. The second form was, 1. To repeat the *Accidents* for parts. 2. To say forenoon lessons in *Propria quæ maribus*, *Quæ genus*, and *As in præcanti*, which they repeated *memoriter*, construed and parsed. 3. To say an afternoon lesson in *Sententia Pueriles*, which they repeated by heart, and construed and parsed. 4. They repeated their tasks every Friday *memoriter*, and parsed their sentences out of English.

3. The third form was enjoined first to repeat two parts together every morning, one out of the *Accidents* and the other out of that forementioned part of the grammar, and together with their parts, each one was made to form one person of a verb active in any of the four conjugations. 2. Their forenoon les-

sons were in *Syntaxis*, which they used to say *memoriter*, then to construe it, and parse only the words which contain the force of the rule. 3. There forenoon lessons were two days in *Æsop's Fables*, and other two days in *Cato*, both which they construed and parsed, and said *Cato memoriter*. 4. These lessons they translated into English and repeated all on Fridays, construing out of their translations into Latin.

4. The fourth form having ended *Syntaxis*, first repeated it and *Propria quæ maribus*, &c., together for parts, and formed a person of a verb passive, as they did the active before. 2. For lessons they proceeded to the by-rules, and so to *Figura* and *Prosodia*. 3. For afternoon lessons they read *Terence* two days and *Mantuan* two days, which they translated into English and repeated on Fridays, as before.

5. The fifth form said one part in the *Latin* and another in the *Greek Grammar* together. 2. Their forenoon lessons were in *Butler's Rhetoric*, which they said *memoriter* and then construed, and applied the example to the definition. 3. Their afternoon lessons were two days in *Ovid's Metamorphosis* and two days in *Tully's Offices*, both which they translated into English. 4. They learned to scan and prove verses in *Flores Poetarum*, and repeated their week's work on Fridays, as before.

6. The sixth form continued their parts in the *Greek Grammar*, and formed a verb active at every part. 2. They read the *Greek Testament* for forenoon lessons, beginning with *St. John's Gospel*. 3. Their afternoon lessons were two days in *Virgil* and two days in *Tully's Orations*. They construed the *Greek Testament* into Latin and the rest into English.

7. The seventh form went on with the *Greek Grammar*, forming at every part a verb passive, or medium. 2. They had their forenoon lessons in *Isocrates*, which they translated into Latin. 3. Their afternoon lessons were two days in *Horace* and two days in *Seneca's Tragedies*, both which they translated into English.

8. The eighth form still continued their parts in the *Greek Grammar*. 2. They said forenoon lessons in *Hesiod*, which they translated into Latin, and afternoon lessons in *Juvenal* and afterwards in *Persius*, which they translated into English.

9. The ninth and highest form said morning parts in the *Hebrew Grammar*, forenoon lessons in *Homer*, and afternoon lessons in some comical author.

Thus when I came to Rotherham, I found two or three sorts of boys in the *Accidents*, and nine or ten several forms, whereof some had but two or three scholars in it, and one of these forms also was not very far from that which was below it. So that I, being to teach all myself alone, was necessitated to reduce them to a lesser number, and to provide such helps for the weaker boys as might enable them to go on with the stronger. Besides, observing how barren the scholars were of proper words and good phrases, with which their present authors did not sufficiently furnish them for speaking or writing Latin, I was forced to make use of such books amongst the rest as were purposely made for that end, and having at last brought the whole school into a good method and order, so that the scholars learned with profit, and I taught them with much ease and delight, I was persuaded to write over what I had done, that I might leave it as a pattern for him that succeeded me; and this was the groundwork of my discovery.

The manner of giving lectures before I came was, 1. For the two highest boys in the eighth form to give lectures to all the lower forms, each his week by turns. 2. The highest scholar in the school gave lectures to the second form. 3. Those in the highest form were commonly left to shift for themselves.

The manner of the master's hearing lessons was this: 1. The highest boy in the form at their coming to say, construed his lesson two or three times over, till he was perfect in it, that his fellows might all learn by him to construe as well as he; then every one construed according to the order in which he stood. 2. They parsed their lesson in that order that they had construed it in. 3. They translated every day after the lesson, and showed it altogether fairly written on Fridays.

Their exercises were these: 1. The four lowest forms translated at vacant times out of some English book. 2. The higher forms, having a subject given them every Saturday, made themes and verses upon it against that day seven night.

The manner of collecting phrases was that every Friday, in the afternoon, the boys in the highest form collected phrases for the lowest forms out of their several authors, which they wrote and committed to memory against Saturday morning.

The set times for disputations were Fridays and Saturdays at noon, and the manner thus: one boy answered his day by course, and all his fellows posed him out of any author which he had read before.

A part of Thursday in the afternoon was spent in getting the *Church Catechism* and the *Six Principles of Christianity* made by Mr. Perkins.

Finding this method (which is used also in most grammar schools) to concur in the main grounds with that which I had been taught at Wakefield, but not to be so plain and easy as that was to children of meaner capacities, I began to seek (not so much to alter any thing, as) to supply what I saw defective in it, having these and such like considerations often in my mind,

1. Though every man liketh his own method best, yet none ought so far to be conceited of his own as not to search after a better for the profiting of his scholars.

2. Though one constant method must diligently be observed, yet trial may be made of another at fit times, so it be done without any distraction to the master or hindrance to his scholars.

3. A new course of teaching must not be brought in suddenly upon scholars that have been long trained in a worse, but by degrees.

4. Some modern schoolmasters seem to have gained a far more easy and nearer way of teaching than many of the more ancient seemed to have.

5. Mr. Brinsley seemeth to have made a discovery of a more perfect method than was in his time used or is yet generally received. Mr. Farnaby, Mr. John Clerke, and some others, have facilitated the way further; but Mr. John Comenius hath lately contrived a shorter course of teaching, which many of late endeavor to follow; and others have more contemptively written what they have thought of learning the Latin tongue in the easiest manner.

6. That for me it would not be amiss, by imitating these and others of whose learning and dexterity in teaching I had got some little experience, and observing the several tempers and capacities of those I taught, to endeavor to find out and contrive such helps as might make the most generally received method

of teaching by grammar, authors and exercises, more brief in itself and more easy and delightful to the teacher and scholar. And for what I have done in this kind, these arguments were especial inducements. That,

1. It is not only possible but necessary to make children understand their tasks, from their very first entrance into learning, seeing they must every one bear his own burden, and not rely upon their fellows altogether in what they do.

2. It is possible and meet for every teacher so to ground his scholars that a change of masters may not much hinder their progress in learning.

3. Things most familiar and obvious to the senses are first to be learned, and such as may be an easy step towards those which are next to be attained.

4. The most vocabulas and phrases of ordinary discourse may and ought to be taught together with the *Latin Grammar*, and the lowest sort of school authors.

5. Boys ought to know the meaning and how to make use of each rule as they learn, yet so as they be not forced upon understanding it.

6. The most useful books ought to be read, and may be taught after one manner in every grammar-school.

7. Children must be furnished with store of matter, and able to write a good style, and showed how to imitate their authors for making exercises, before they be put to use their own invention.

8. It is tyranny in the master to beat a scholar for not doing that which he knoweth not how to go about; so that he must first know him to be well able, and then he may more justly punish his neglect.

9. Many young schoolmasters are more puzzled about framing to themselves a good method than toiled in the exercise of teaching school.

10. No man ever had such an acute and direct method, but another able scholar might observe and follow it.

11. Many masters that are excellent in perfecting scholars have not the patience to ground them, and many that have the skill to ground a scholar well in his rudiments are not of ability to bring him on to perfection in grammatical exercises.

12. In many schools, one master alone beareth the whole burden of teaching, without any help of an usher.

13. Every one that teacheth a grammar-school is not able to make a right choice, nor knoweth he the true use of our best classical authors.

14. It is a prime part of a schoolmaster to instruct his scholars well in the principles of the Christian religion, and to make them acquainted with the Holy Scriptures.

15. It is an utter undoing to many scholars to be sent ungrounded to the universities; and parents are generally unwilling to have their children tarry long at the school, and therefore it is good for masters to make use of the shortest and surest way of teaching.

16. It is very necessary and hath been ever wished that some of our most famous and best schoolmasters would for the benefit of others set themselves to work to find out and publish the exactest method of teaching, which might be generally received till a better were known; for by that means they should do much good to the Church and Commonwealth, and somewhat herein advantage themselves, seeing every parent will be willing to have his son taught by one whom he knoweth to be constantly diligent in a good way of teaching.

And the hopes that I conceived hereby to provoke my betters hath especially encouraged me (at last) to yield to my friends' importunity, in setting down this *Method of Teaching*, and writing down also this form of *School Government*, which I heartily commend to God's heavenly blessing and the candid censure of the more judicious, hoping that as I intend chiefly the general good, so none will requite me with malicious obtreaction, which if any shall do, I charitably pray for them beforehand, that God would for Christ's sake forgive them, and grant that I may not heed what they write or say concerning me or my labors, so as to be discouraged in my honest endeavors for the public service.

Δόξα ἐν ᾧ ψίγεις θεῶ, καὶ ἐστὶ γῆς εἰρήνη, ἐν ἀνθρώποις εὐδοκία. λικ, β. ιδ.

SCIENTIFIC INSTRUCTION IN ENGLAND.

ABRAHAM COWLEY.

ABRAHAM COWLEY, whose plan of a "Philosophical College," or "*Proposition for the Advancement of Experimental Philosophy*," was preferred by Dr. Johnson, to that of Milton's Academy, was born in London, in 1618, and died in 1667. His early training was obtained as King's Scholar at Westminster School, whence he proceeded to Trinity College, Cambridge, in 1636. In 1643, he left the university, and for many years resided on the continent in some official relation to the Queen, and Lord Falkland. Soon after his return to England in 1656, he published a volume in which his plan of a College was made public. Among the noticeable features of his college are professors resident of "all sorts of Natural, Experimental Philosophy;" and among the studies, are enumerated "Agriculture, Architecture, Art, Military, Navigation, Gardening; the Mysteries of all Trades, and improvement of them, and briefly all things contained in the Catalogue of Natural Histories annexed to my Lord Bacon's *Organon*." The instruction was to be free—"that none, though never so rich, shall pay any thing for their teaching." The list of authors to be read closely resembles that of Milton, and such as serve "an apprenticeship in Natural Philosophy," "upon Festivals and Play-times, they should exercise themselves in the fields by Riding, Leaping, Fencing, Mustering and Training, after the manner of soldiers, &c." Four of the Professors are to be always traveling beyond seas, leaving a deputy to supply their duties, and one of the four "professors itinerate" is to be assigned "to each of the four great divisions of the globe, to reside there three years, and to give a constant account of all things that belong to the Learning, and especially the Natural Experimental Philosophy of those parts." They must take solemn oath to communicate what they "fully believe to be true, and to confess and recant it as soon as they find themselves in an error." The institution was to be furnished with suitable buildings and grounds—"Towers for the Observation of the Celestial Bodies"—"Laboratories for Chemical Operations"—"Gardens for all manner of experiments concerning Plants—and for the convenient receptacles of all sorts of creatures"—indeed, all the equipments which the great universities of Europe and the great cities of London and Paris now furnish for the illustration and advancement of Natural History, and Practical Science.

In his Essay on "Agriculture," Cowley expresses "the wish (but can not in these times much hope to see it,) that one college in each university were erected and appropriated to this study" with "four professors" to teach the four parts; 1. Aration; 2. Pasturage; 3. Gardens, Orchards, Vineyards and Woods; 4. Rural Economy, Bees, Swine, Poultry, Fish, and other Sports of the Field. Their business should not be "to read lectures, but to instruct their pupils in the whole method and course of this study," and "should be chosen for solid and experimental knowledge of the things they teach—so industrious and public spirited, as I conceive Mr. Hartlib to be, if the gentleman be yet alive."

V. PLAN OF A PHILOSOPHICAL COLLEGE.

A PROPOSITION FOR THE ADVANCEMENT OF EXPERIMENTAL PHILOSOPHY—1661.

BY ABRAHAM COWLEY.

THE COLLEGE.

THAT the Philosophical College be situated within one, two, or (at farthest) three miles of London, and if it be possible to find that convenience, upon the side of the river, or very near it.

That the revenue of this College amount to four thousand a year.

That the company received into it be as follows:—

1. Twenty philosophers or professors.
2. Sixteen young scholars, servants to the professors.
3. A chaplain.
4. A bailee for the revenue.
5. A manciple or purveyor for the provisions of the house.
6. Two gardeners.
7. A master cook.
8. An under cook.
9. A butler.
10. An under butler.
11. A surgeon.
12. Two lungs, or chemical servants.
13. A library-keeper, who is likewise to be apothecary, druggist, and keeper of instruments, engines, &c.
14. An officer to feed and take care of all beasts, fowl, &c., kept by the College.
15. A groom of the stable.
16. A messenger to send up and down for all uses of the College.
17. Four old women to tend the chambers, keep the house clean, and such like services.

That the annual allowance for this company be as follows:—

1. To every professor, and to the chaplain, one hundred and twenty pounds.
2. To the sixteen scholars, twenty pounds a piece, ten pounds for their diet, and ten pounds for their entertainment.
3. To the bailee, thirty pounds, besides allowance for his journeys.
4. To the purveyor or manciple, thirty pounds.
5. To each of the gardeners, twenty pounds.
6. To the master cook, twenty pounds.
7. To the under cook, four pounds.
8. To the butler, ten pounds.
9. To the under butler, four pounds.
10. To the surgeon, thirty pounds.
11. To the library-keeper, thirty pounds.
12. To each of the lungs, twelve pounds.
13. To the keeper of the beasts, six pounds.
14. To the groom, five pounds.
15. To the messenger, twelve pounds.
16. To the four necessary women, ten pounds.

For the manciple's table, at which all the servants of the house are to eat, except the scholars, one hundred and sixty pounds. For three horses for the service of the College, thirty pounds.

All which amounts to three thousand two hundred and eighty-five pounds. So that there remains for keeping of the house and gardens, and operatories, and instruments and animals, and experiments of all sorts, and all other expenses, seven hundred and fifteen pounds. Which were a very inconsiderable sum for the great uses to which it is designed, but that I conceive the industry of the College will in a short time so enrich itself as to get a far better stock for the advance and enlargement of the work when it is once begun; neither is the continuance of particular men's liberality to be despaired of,

when it shall be encouraged by the sight of that public benefit which will accrue to all mankind, and chiefly to our nation, by this foundation. Something likewise will arise from leases and other casualties; that nothing of which may be diverted to the private gain of the professors, or any other use besides that of the search of nature, and by it the general good of the world, and that care may be taken for the certain performance of all things ordained by the institution, as likewise for the protection and encouragement of the company, it is proposed,

That some person of eminent quality, a lover of solid learning, and no stranger in it, be chosen Chancellor or President of the College, and that eight governors more, men qualified in the like manner, be joined with him, two of which shall yearly be appointed Visitors of the College, and receive an exact account of all expenses even to the smallest, and of the true estate of their public treasure, under the hands and oaths of the professors resident.

That the choice of the professors in any vacancy belong to the Chancellor and the Governors, but that the professors (who are likeliest to know what men of the nation are most proper for the duties of their society) direct their choice by recommending two or three persons to them at every election. And that if any learned person within his majesty's dominions discover or eminently improve any useful kind of knowledge, he may upon that ground for his reward and the encouragement of others, be preferred, if he pretend to the place, before anybody else.

That the Governors have power to turn out any professor who shall be proved to be either scandalous or unprofitable to the Society.

That the College be built after this, or some such manner: That it consist of three fair quadrangular courts, and three large grounds, inclosed with good walls behind them. That the first court be built with a fair cloister, and the professors' lodgings or rather little houses, four on each side, at some distance from one another, and with little gardens behind them, just after the manner of the *Chartreux* beyond sea. That the inside of the cloister be lined with a gravel walk, and that walk with a row of trees, and that in the middle there be a parterre of flowers, and a fountain.

That the second quadrangle, just behind the first, be so contrived as to contain these parts: 1. A chapel. 2. A hall with two long tables on each side for the scholars and officers of the house to eat at, and with a pulpit and forms at the end for the public lectures. 3. A large and pleasant dining-room within the hall for the professors to eat in, and to hold their assemblies and conferences. 4. A public school-house. 5. A library. 6. A gallery to walk in, adorned with the pictures or statues of all the inventors of any thing useful to human life, as printing, guns, America, &c., and of late in anatomy the circulation of the blood, the milky veins, and such like discoveries in any art, with short eulogies under the portraits; as likewise the figures of all sorts of creatures, and the stuffed skins of as many strange animals as can be gotten. 7. An anatomy chamber adorned with skeletons and anatomical pictures, and prepared with all conveniences for dissection. 8. A chamber for all manner of drugs and apothecaries' materials. 9. A mathematical chamber furnished with all sorts of mathematical instruments, being an appendix to the library. 10. Lodgings for the chaplain, surgeon, library-keeper and purveyor, near the chapel, anatomy chamber, library, and hall.

That the third court be on one side of these, very large, but meanly built, being designed only for use and not for beauty too, as the others. That it contain the kitchen, butteries, brewhouse, bakehouse, dairy, lardry, stables, &c., and especially great laboratories for chemical operations, and lodgings for the under servants.

That behind the second court be placed the garden, containing all sorts of plants that our soil will bear, and at the end a little house of pleasure, a lodge for the gardener, and a grove of trees cut into walks.

That the second inclosed ground be a garden, destined only to the trial of all manner of experiments concerning plants, as their melioration, acceleration, retardation, conservation, composition, transmutation, coloration, or whatsoever else can be produced by art, either for use or curiosity, with a lodge in it for the gardener.

That the third ground be employed in convenient receptacles for all sorts of creatures which the professors shall judge necessary for their more exact search into the nature of animals, and the improvement of their uses to us.

That there be likewise built in some place of the College where it may serve most for ornament of the whole, a very high tower for observation of celestial bodies, adorned with all sorts of dials, and such like curiosities; and that there be very deep vaults, made under ground, for experiments most proper to such places, which will be undoubtedly very many.

Much might be added, but truly I am afraid this is too much already for the charity or generosity of this age to extend to; and we do not design this after the model of Solomon's house in my Lord Bacon, (which is a project for experiments that can never be experimented,) but propose it within such bounds of expense as have often been exceeded by the buildings of private citizens.

PROFESSORS, SCHOLARS, CHAPLAIN, AND OTHER OFFICERS.

That of the twenty professors, four be always travelling beyond seas, and sixteen always resident, unless by permission upon extraordinary occasions, and every one so absent, leaving a deputy behind him to supply his duties.

That the four professors itinerate be assigned to the four parts of the world—Europe, Asia, Africa, and America—there to reside three years at least, and to give a constant account of all things that belong to the learning, and especially, natural experimental philosophy of those parts.

That the expense of all dispatches, and all books, simples, animals, stones, metals, minerals, &c., and all curiosities whatsoever, natural or artificial, sent by them to the college, shall be defrayed out of the treasury, and an additional allowance (above the 120*l*.) made to them as soon as the college revenue shall be improved.

That at their going abroad they shall take a solemn oath never to write anything to the College, but what, after very diligent examination, they shall fully believe to be true, and to confess and recant it as soon as they find themselves in an error.

That the sixteen professors resident shall be bound to study and teach all sorts of natural, experimental philosophy, to consist of the mathematics, mechanics, medicine, anatomy, chemistry, the history of animals, plants, minerals, elements, &c., agriculture, architecture, art military, navigation, gardening; the mysteries of all trades, and improvement of them; the facture of all merchan-

dises, all natural magic, or divination; and briefly, all things contained in the catalogue of natural histories annexed to my Lord Bacon's *Organon*.

That once a day from Easter till Michaelmas, and twice a week from Michaelmas to Easter, in the hours in the afternoon most convenient for auditors from London according to the time of the year, there shall be a lecture read in the hall, upon such parts of natural experimental philosophy as the professors shall agree on among themselves, and as each of them shall be able to perform usefully and honorably.

That two of the professors by daily, weekly or monthly turns shall teach the public schools according to the rules hereafter prescribed.

That all the professors shall be equal in all respects (except precedency, choice of lodging, and such like privileges, which shall belong to seniority in the College,) and that all shall be masters and treasurers by annual turns, which two officers for the time being, shall take place of all the rest, and shall be *Arbitri duarum Mensarum*.

That the master shall command all the officers of the College, appoint assemblies or conferences upon occasion, and preside in them with a double voice, and in his absence the treasurer, whose business is to receive and disburse all moneys by the master's order in writing, (if it be an extraordinary,) after consent of the other professors.

That all the professors shall sup together in the parlor within the hall every night, and shall dine there twice a week (to wit Sundays and Thursdays,) at two round tables for the convenience of discourse, which shall be for the most part of such matters as may improve their studies and professions, and to keep them from falling into loose or unprofitable talk, shall be the duty of the two *Arbitri Mensarum*, who may likewise command any of the servant-scholars to read them what they shall think fit, whilst they are at table; that it shall belong likewise to the said *Arbitri Mensarum* only, to invite strangers, which they shall rarely do, unless they be men of learning or great parts, and shall not invite above two at a time to one table, nothing being more vain and unfruitful than numerous meetings of acquaintance.

That the professors resident shall allow the College twenty pounds a year for their diet, whether they continue there all the time or not.

That they shall have once a week an assembly or conference concerning the affairs of the College, and the progress of their experimental philosophy.

That if any one find out any thing which he conceives to be of consequence, he shall communicate it to the assembly to be examined, experimented, approved, or rejected.

That if any one be author of an invention that may bring in profit, the third part of it shall belong to the inventor, and the two other to the Society; and besides, if the thing be very considerable, his statue or picture, with an eulogy under it, shall be placed in the gallery, and made a denizen of that corporation of famous men.

That all the professors shall be always assigned to some particular inquisition (besides the ordinary course of their studies,) of which they shall give an account to the assembly, so that by this means there may be every day some operation or other made in all the arts, as chemistry, anatomy, mechanics, and the like, and that the College shall furnish for the charge of the operation.

That there shall be kept a register under lock and key, and not to be seen

but by the professors, of all the experiments that succeed, signed by the persons who made the trial.

That the popular and received errors in experimental philosophy (with which, like weeds in a neglected garden, it is now almost all overgrown,) shall be evinced by trial, and taken notice of in the public lectures, that they may no longer abuse the credulous, and beget new ones by consequence or similitude.

That every third year (after the full settlement of the foundation,) the College shall give an account in print, in proper and ancient Latin, of the fruits of their triennial industry.

That every professor resident shall have his scholar to wait upon him in his chamber, and at table, whom he shall be obliged to breed up in natural philosophy, and render an account of his progress to the assembly, from whose election he received him, and therefore is responsible to it, both for the care of his education, and the just and civil usage of him.

That the scholar shall understand Latin very well, and be moderately initiated in the Greek, before he be capable of being chosen into the service, and that he shall not remain in it above seven years.

That his lodging shall be with the professor whom he serves.

That no professor shall be a married man, or a divine, or lawyer in practice, only physic he may be allowed to prescribe, because the study of that art is a great part of the duty of his place, and the duty of that is so great that it will not suffer him to lose much time in mercenary practice.

That the professors shall in the College wear the habit of ordinary masters of art in the universities, or of doctors, if any of them be so.

That they shall all keep an inviolable and exemplary friendship with one another, and that the assembly shall lay a considerable pecuniary mulct upon any one who shall be proved to have entered so far into a quarrel as to give uncivil language to his brother professor; and that the perseverance in any enmity shall be punished by the Governors with expulsion.

That the chaplain shall eat at the master's table, (paying his twenty pounds a year as the others do,) and that he shall read prayers once a day at least, a little before supper-time; that he shall preach in the chapel every Sunday morning, and catechise in the afternoon the scholars and the school-boy; that he shall every month administer the Holy Sacrament; that he shall not trouble himself and his auditors with the controversies of divinity, but only teach God in his just commandments, and in his wonderful works.

THE SCHOOL.

That the school may be built so as to contain about two hundred boys.

That it be divided into four classes, not as others are ordinarily into six or seven, because we suppose that the children sent hither to be initiated in things as well as words, ought to have past the two or three first, and to have attained the age of about thirteen years, being already well advanced in the Latin grammar and some authors.

That none, though never so rich, shall pay any thing for their teaching; and that if any professor shall be convicted to have taken any money in consideration of his pains at the school, he shall be expelled with ignominy by the Governors; but if any persons of great estate and quality, finding their sons much better proficient in learning here than boys of the same age commonly

are at other schools, shall not think fit to receive an obligation of so near concernment without returning some marks of acknowledgment, they may, if they please, (for nothing is to be demanded,) bestow some little rarity or curiosity upon the Society in recompense of their trouble.

And because it is deplorable to consider the loss which children make of their time at most schools, employing or rather casting away six or seven years in the learning of words only, and that too very imperfectly:

That a method be here established for the infusing knowledge and language at the same time into them; and that this may be their apprenticeship in natural philosophy. This we conceive may be done, by breeding them in authors or pieces of authors, who treat of some parts of nature, and who may be understood with as much ease and pleasure as those which are commonly taught; such are in Latin, *Varro, Cato, Columella, Pliny*, part of *Celsus*, and of *Seneca, Cicero de Divinatione, de Natura Deorum*, and several scattered pieces, *Virgil's Georgics, Grotius, Nemesianus, Manilius*; and because the truth is, we want good poets (I mean we have but few) who have purposely treated of solid and learned, that is, natural matters, (the most part indulging to the weakness of the world, and feeding it either with the follies of love, or with the fables of gods and heroes,) we conceive that one book ought to be compiled of all the scattered little parcels among the ancient poets that might serve for the advancement of natural sciences, and which would make no small or unusual or unpleasant volume. To this we would have added the *Morals and Rhetorics of Cicero*, and the *Institutions of Quintilian*; and for the comedians, from whom almost all that necessary part of common discourse and all the most intimate proprieties of the language are drawn, we conceive the boys made be made masters of them, as a part of their recreation and not of their task, if once a month, or at least once in two, they act one of *Terence's comedies*, and afterwards (the most advanced) some of *Plautus'*; and this is for many reasons one of the best exercises they can be enjoined, and most innocent pleasures they can be allowed. As for the Greek authors, they may study *Nicander, Oppianus*, (whom Scaliger does not doubt to prefer above *Homer* himself, and place next to his adored *Virgil*.) *Aristotle's History of Animals*, and other parts; *Theophrastus* and *Dioscorides*, of *Plants*, and a collection made out of several, both poets and other Grecian writers. For *morals and rhetoric, Aristotle* may suffice, or *Hermogenes* and *Longinus* be added for the latter. With the history of animals they should be showed anatomy as a divertisement, and made to know the figures and natures of those creatures which are not common among us, disabusing them at the same time of those errors which are universally admitted concerning many. The same method should be used to make them acquainted with all plants; and to this must be added a little of the ancient and modern geography, the understanding of the globes, and the principles of geometry and astronomy. They should likewise use to declaim in Latin and English, as the Romans did in Greek and Latin; and in all this travel be rather led on by familiarity, encouragement and emulation, than driven by severity, punishment and terror. Upon festivals and playtimes they should exercise themselves in the fields by riding, leaping, fencing, mustering and training after the manner of soldiers, &c. And to prevent all dangers and all disorder, there should always be two of the scholars with them to be as witnesses and directors of their actions. In foul weather it would not be amiss for them to learn to dance, that is, to learn just so much (for all

beyond is superfluous, if not worse,) as may give them a graceful comportment of their bodies.

Upon Sundays, and all days of devotion, they are to be a part of the chaplain's province.

That for all these ends the College so order it, as that there may be some convenient and pleasant houses thereabouts, kept by religious, discreet, and careful persons, for the lodging and boarding of young scholars, that they have a constant eye over them to see that they be bred up there piously, cleanly, and plentifully, according to the proportion of their parents' expenses.

And that the College, when it shall please God either by their own industry and success, or by the benevolence of patrons, to enrich them so far as that it may come to their turn and duty to be charitable to others, shall at their own charges erect and maintain some house or houses for the entertainment of such poor men's sons whose good natural parts may promise either use or ornament to the commonwealth, during the time of their abode at school, and shall take care that it shall be done with the same conveniences as are enjoyed even by rich men's children, (though they maintain the fewer for that cause,) there being nothing eminent and illustrious to be expected from a low, sordid, and hospital-like education.

CONCLUSION.

If I be not much abused by a natural fondness to my own conceptions, (that *εὐπλοία* of the Greeks, which no other language has a proper word for,) there was never any project thought upon, which deserves to meet with so few adversaries as this; for who can without impudent folly oppose the establishment of twenty well selected persons in such a condition of life, that their whole business and sole profession may be to study the improvement and advantage of all other professions, from that of the highest general even to the lowest artisan? Who shall be obliged to employ their whole time, wit, learning, and industry, to these four, the most useful that can be imagined, and to no other ends: First, to weigh, examine, and prove all things of nature delivered to us by former ages, to detect, explode, and strike a censure through all false moneys with which the world has been paid and cheated so long, and (as I may say) to set the mark of the College upon all true coins, that they may pass hereafter without any farther trial. Secondly, to recover the lost inventions, and, as it were, drowned lands of the ancients. Thirdly, to improve all arts which we now have; and lastly, to discover others, which we yet have not. And who shall besides all this (as a benefit by-the-by) give the best education in the world (purely gratis) to as many men's children as shall think fit to make use of the obligation. Neither does it at all check or interfere with any parties in state or religion, but is indifferently to be embraced by all differences in opinion, and can hardly be conceived capable (as many good institutions have done) even of degeneration into any thing harmful. So that, all things considered, I will suppose this proposition will encounter with no enemies; the only question is, whether it will find friends enough to carry it on from discourse and design to reality and effect; the necessary expenses of the beginning (for it will maintain itself well enough afterwards) being so great (though I have set them as low as is possible in order to so vast a work) that it may seem hopeless to raise such a sum out of those few dead relics of human charity and public generosity which are yet remaining in the world.

- EXTRACTS FROM AN ESSAY ON AGRICULTURE, BY A. COWLEY.

There is no other sort of life that affords so many branches of praise to a panegyrist—the utility of it to a man's self: the usefulness or rather necessity of it to all the rest of mankind: the innocence, the pleasure, the antiquity, the dignity. The utility (I mean plainly the lucre of it) is not so great now in our nation as arises from merchandise and the trading of the city, from whence many of the best estates and chief honors of the kingdom are derived: we have no men now fetched from the plow to be made lords, as they were in Rome to be made consuls and dictators, the reason of which I conceive to be from an evil custom, now grown as strong among us as if it were a law, which is, that no men put their children to be bred up apprentices in agriculture, as in other trades, but such who are so poor, that when they come to be men, they have not wherewithal to set up in it, and so can only farm some small parcel of ground, the rent of which devours all but the bare subsistence of the tenant: whilst they who are proprietors of the land, are either too proud, or for want of that kind of education, too ignorant to improve their estates, though the means of doing it be as easy and certain in this as in any other track of commerce. If there were always two or three thousand youths for seven or eight years bound to this profession, that they might learn the whole art of it, and afterwards be enabled to be masters in it, by a moderate stock, I can not doubt but that we should see as many aldermen's estates made in the country, as now we do out of all kind of merchandising in the city. There are as many ways to be rich, and which is better, there is no possibility to be poor, without such negligence as can neither have excuse nor pity; for a little ground will without question feed a little family, and the superfluities of life (which are now in some cases by custom made almost necessary) must be supplied out of the superabundance of art and industry, or condemned by as great a degree of philosophy. As for the necessity of this art, it is evident enough, since this can live without all others, and no one other without this. This is like speech, without which the society of men can not be preserved: the others like figures and tropes of speech which serve only to adorn it. Many nations have lived, and some do still, without any art but this; not so elegantly, I confess, but still they live, and almost all the other arts which are here practiced, are beholdng to this for most of their materials.

The innocence of this life is the next thing for which I commend it, and if husbandmen preserve not that, they are much to blame, for no men are so free from the temptations of iniquity. They live by what they can get by industry from the earth, and others by what they can catch by craft from men. They live upon an estate given them by their mother, and others upon an estate cheated from their brethren. They live like sheep and kine by the allowances of nature, and others like wolves and foxes by the acquisitions of rapine. And, I hope, I may affirm (without any offense to the great) that sheep and kine are very useful, and that wolves and foxes are pernicious creatures. They are, without dispute, of all men the most quiet and least apt to be inflamed to the disturbance of the commonwealth: their manner of life inclines them, and interest binds them to love peace. In our late mad and miserable civil wars, all other trades, even to the meanest, set forth whole troops, and raised up some great commanders, who became famous and mighty for the mischiefs they

had done; but I do not remember the name of any one husbandman who had so considerable a share in the twenty years' ruin of his country, as to deserve the curses of his countrymen; and if great delights be joined with so much innocence, I think it is ill done of men not to take them here where they are so tame and ready at hand, rather than hunt for them in courts and cities where they are so wild, and the chase so troublesome and dangerous.

We are here among the vast and noble scenes of nature; we are there among the pitiful shifts of policy: we walk here in the light and open ways of the divine bounty; we grope there in the dark and confused labyrinths of human malice: our senses are here feasted with the clear and genuine taste of their objects; which are all sophisticated there, and for the most part overwhelmed with their contraries. Here pleasure looks (methinks) like a beautiful, constant, and modest wife; it is there an impudent, fickle, and painted harlot. Here is harmless and cheap plenty, there guilty and expensive luxury.

I shall only instance in one delight more, the most natural and best natured of all others, a perpetual companion of the husbandman, and that is the satisfaction of looking round about him, and seeing nothing but the effects and improvements of his own art and diligence, to be always gathering of some fruits of it, and at the same time to behold others ripening, and others budding: to see all his fields and gardens covered with the beauteous creatures of his own industry; and to see, like God, that all his works are good.

———*Hinc atque hinc glomerantur Orcades; ipsi
Agricolæ tacitum pertendant gaudia pectus.*

On his heart-string a secret joy does strike.

The antiquity of his art is certainly not to be contested by any other. The three first men in the world were a gardener, a ploughman, and a grazier; and if any man object that the second of these was a murderer, I desire he would consider, that as soon as he was so, he quitted our profession and turned builder. It is for this reason, I suppose, that *Ecclesiasticus* forbids us to hate husbandry; *because (says he) the Most High has created it.* We were all born to this art, and taught by nature to nourish our bodies by the same earth out of which they were made, and to which they must return, and pay at last for their sustenance.

Behold the original and primitive nobility of all those great persons, who are too proud now, not only to till the ground, but almost to tread upon it. We may talk what we please of lilies, and lions rampant, and spread eagles in fields *d'or*, or *d'argent*; but if heraldry were guided by reason, a plough in a field arable would be the most noble and ancient arms.

All these considerations make me fall into the wonder and complaint of *Columella*. How it should come to pass that all arts or sciences, (for the dispute, which is an art, and which a science, does not belong to the curiosity of us husbandmen,) metaphysics, physic, morality, mathematics, logic, rhetoric, &c., which are all, I grant, good and useful faculties, (except only metaphysics, which I do not know whether it be any thing or no,) but even vaulting, fencing, dancing, attiring, cookery, carving, and such like vanities, should all have public schools and masters, and yet that we should never see or hear of any man who took upon him the profession of teaching this so pleasant, so virtuous, so profitable, so honorable, so necessary, art.

A man would think, when he's in serious humor, that it were but a vain,

irrational and ridiculous thing, for a great company of men and women to run up and down in a room together, in a hundred several postures and figures to no purpose, and with no design; and therefore dancing was invented first, and practiced anciently in the ceremonies of the heathen religion, which consisted all in mummerly and madness; the latter being the chief glory of the worship, and accounted divine inspiration. This, I say, a severe man would think, though I dare not determine so far against so customary a part now of good breeding. And yet, who is there among our gentry, that does not entertain a dancing-master for his children as soon as they are able to walk? But did ever any father provide a tutor for his son, to instruct him betimes in the nature and improvements of that land which he intended to leave him? That is at least a superfluity, and this a defect in our manner of education; and therefore I could wish (but can not in these times much hope to see it) that one College in each University were erected and appropriated to this study, as well as there are to medicine and the civil law. There would be no need of making a body of scholars and fellows, with certain endowments, as in other colleges; it would suffice, if after the manner of halls in Oxford, there were only four professors constituted, (for it would be too much work for only one master, or principal, as they call him there) to teach these four parts of it. First, aration, and all things relating to it. Secondly, pasturage. Thirdly, gardens, orchards, vineyards, and woods. Fourthly, all parts of rural economy, which would contain the government of bees, swine, poultry, decoys, ponds, &c., and all that which *Varro* calls *Villaticas Pastiones*, together with the sports of the field (which ought to be looked upon not only as pleasures, but as parts of housekeeping) and the domestic conservation and uses of all that is brought in by industry abroad. The business of these professors should not be, as is commonly practiced in other arts, only to read pompous and superficial lectures out of *Virgil's Georgics*, *Pliny*, *Varro*, or *Columella*, but to instruct their pupils in the whole method and course of this study, which might be run through perhaps with diligence in a year or two; and the continual succession of scholars, upon a moderate taxation for their diet, lodging and learning, would be a sufficient constant revenue for maintenance of the house and the professors, who should be men not chosen for the ostentation of critical literature, but for solid and experimental knowledge of the things they teach such men; so industrious and public-spirited as I conceive Mr. Hartlib to be, if the gentleman be yet alive; but it is needless to speak farther of my thoughts of this design, unless the present disposition of the age allowed more probability of bringing it into execution.

VI. PUBLIC INSTRUCTION IN ZURICH.

TERRITORY—POPULATION—GOVERNMENT.

THE CANTON OF ZURICH ranks second in population (266,265 in 1860,) and seventh in territory (659 square miles,) among the Cantons of Switzerland. The religion of a large majority (255,000,) is Protestant, and its government is a representative democracy—every citizen being a voter at the age of twenty. The cantonal legislature consists of two hundred and twelve members, who are elected for ten years, and who choose a smaller council of twenty-five members, (one-third going out every two years,) whose president is the chief magistrate of the Canton. The Canton is represented in the Federal Diet or Congress by thirteen members.

The Canton of Zurich is divided politically into eleven districts, (*Bezirke*,) subdivided into counties, (*Zuenfte*,) and the latter subdivided into communes, (*Gemeine*.) Every county, according to the number of its inhabitants, elects members for the Great Council, which is only complete after the members elect from the counties have elected thirteen more members by their votes. Bankrupts or persons convicted of dishonorable crimes are disfranchised permanently or for a time. The Great Council, as representative of the people, is intrusted with the legislation. As the supreme authority of the country, it has the power to appoint all officers of the Canton, or to confirm appointments proposed. It elects the administration of the Canton (*Regierungsrath*—Government council,) but only part of the Board of Education. By the free vote of the counties the government of each district is selected, (*Bezirke collegium*,) which fills all district offices, or has the final approval of all nominations. It appoints for instance the judges of the district, and proposes to the Government council three names for district governor, (the head of the administration in the district,) who is the representative of the Government council in the district.

The subdivision of the Canton in regard to education is as follows:—School community or neighborhood, parochial community (school circle,) district, Canton. The members of the school community are all those who are required to contribute for the support of the school, and entitled to its benefits; these select their school board. If a parochial community has several schools and consequently several school communities, the members of the parochial community are not identical with the members of the different school communities, as for instance resident citizens may

be members of a school community. The school districts agree with the political districts, the school circles with the parochial communities.

SYSTEM OF PUBLIC INSTRUCTION.

The Public Schools of the Canton are classified as follows :—

I. PRIMARY SCHOOLS, (General popular school—communal school.)

1. Day school.

a. Elementary school, attended by children from 6–9 years old.

b. Real school, “ “ “ “ 9–12 “ “

2. Repetition school, “ “ “ “ 12–15 “ “

3. Singing school, attended by pupils beyond the age of 15 years, who at the same time attend the class for religious instruction.

II. SECONDARY SCHOOL, (Superior popular district school,) attended by pupils of 12–15 years, and connected with the day-school.

III. SUPERIOR AND PROFESSIONAL SCHOOLS, (Cantonal schools.)

1. The School of the Canton.

a. Gymnasium, preparatory for professional studies.

a. *Lower gymnasium*, for boys of 12–16 years.

b. *Higher gymnasium*, for boys of 16–19 years.

b. Industrial school, preparatory for technical vocations and technical professional studies.

a. *Lower school*, for boys of 12–15 years.

b. *Higher school*, for boys of 15–18 years.

2. THE SUPERIOR SCHOOL, (University,) connected with the Cantonal schools, particularly with the gymnasium—a school of purely liberal studies, as well as a professional school for the statesman, jurist, physician, theologian and teacher of Superior schools.

3. PROFESSIONAL SCHOOLS, joined to the Secondary-school.

a. Seminary for Teachers.

b. Veterinary school.

c. Agricultural Institute.

The attendance at the day school is obligatory to all children. Scholars who, after passing the day school, do not enter the secondary or the canton school, are required by law to attend the repetition school, in which instruction is given on one day per week, and afterwards the singing school, which demands their attendance for one hour in the week.

Fathers who have given evidence of their ability to instruct in the primary elements of education, are permitted to teach their children at home, instead of sending them to the primary school. Whoever occupies a public teachership, or acquires the certificate of eligibility for such position, is a member of the Board of Teachers of the Canton of Zurich. Those who teach in secondary and primary schools, and have acquired the qualification for secondary or primary instruction, compose the body of public teachers.

All the members of the Board of Teachers are voting members of the

School Synod. All the public teachers of a district form a district-chapter of teachers. The teachers at a seminary belong to the chapter of the district in which the institute is situated. The director of the seminary has the privilege of an advisory member of *all* the chapters. Synod and chapter elect their officers from their own members every two years.

Every parochial community elects a school committee, with the resident pastor as chairman, for the inspection of their schools and general superintendence of their interests; the other members of this committee—to the number of five at least—are elected by the parochial members for a term of four years, in the manner that the term of half of them expires every two years. They can be reelected.

The teacher is entitled to a seat in this school committee as advisory member. The superintendence over the schools of a district is vested in a district school committee, composed generally of seven members, two of whom must be pastors, and two teachers, and the remainder must be elected from citizens not of these professions. The two theologians are elected by the ministerial chapter, and the two teachers by the chapter of teachers of the district; the three other members by the government of the district (*Bezirks collegium*.)

The term of office is six years; every three years a new election of three members takes place, but the old members can be reelected. The district-school committee elect three alternates, one from the teachers, one from the ministers, and the third from the residents of the district.

Every member of the district school committee is appointed inspector of a certain number of schools in his district. Each primary school must be visited twice a year by the parochial school committee and by the inspector. The inspector conducts the public examination and makes a report on the condition of the school to the district committee. Beyond the inspection of schools it is the duty of the district committee to see that all laws regarding public instruction are faithfully observed; they are the representatives of the Cantonal Board of Education.

Every secondary-school district (which comprehends generally the several school communities of more than one parochial commune,) has for the administration and superintendence of the secondary schools a secondary-school committee, two members of which are elected by the district school committee, and the remaining two by the parochial school committee, for the same term as the members of the last named committee.

The number of members of the secondary-school committee elected by the parochial committee depends on the number of school communities united in the secondary-school district. Every school community shall have at least one member in this secondary-school committee; the latter elect their president from the members, and each member is required to visit the school at least twice in every year. Moreover every secondary school is visited by a district inspector.

The Board of Education superintends all matters of instruction of the

entire Canton. For the purpose of consultation the Board is divided into two sections, the first for secondary, the other for primary education.

The proceedings of the Board of Education are always published in the official papers. The Director of Education, a member of the Great Council, is President of the Board; and of the other six members, two are elected by the School synod from the teachers, and four are appointed by the Government council.

The Board of Education selects the presidents of the district school committees from the members of the same; the presidents of the district committees form the superintending board of the high school. All superintendents of other schools of the Canton are either appointed directly by the Board of Education, or nominated by them for appointment to the Government council. An exception from this rule is the Agricultural Institute, which belongs to the Department of the Interior, and is under the special direction of the Committee of Agriculture attached to this department. The members of the superintending board of this Institute are elected by the Government council on the nomination of the Department of the Interior. The directors of cantonal schools have a privileged seat in the meetings of their superintending board, and are advisory members. Every parochial and secondary-school committee makes a yearly report to the district committee after the annual examinations; the district committee, on the basis of the reports from the parochial committee and the inspectors, submits an annual report on the condition and progress of schools of their district to the Board of Education, and the Director of Education, from these and from the reports of superintendents of superior schools, completes the report on education in the district. The presidents of the chapter of teachers report on the proceedings of the chapter to the director of the Seminary, and the latter renders a total account on the chapters. The reports of the Director of Education and of the director of the seminary are presented to the School synod, which generally orders the publication of the same.

All the officers of the parochial, secondary and district committees labor gratuitously. As members of special committees for inspection of new buildings, etc., they are paid actual expenses. The recorder of the district committee and the president of the chapter receive a moderate remuneration; the members of the Board of Education receive mileage in proportion to the distance they reside from Zurich.

In school matters, appeal can be taken from the decision of the parochial committee to the district committee, and finally to the Board of Education.

The definite appointment of primary teachers is made by the school community; that of secondary teachers by the secondary-school committees; teachers of the cantonal schools are appointed by the Board of Education, or nominated for appointment to the Government council. In regard to the Agricultural Institute, the Department of the Interior and the Committee on Agriculture again take the place of the Board of

Education. All primary and secondary teachers elected must be approved by the Board of Education; but this approval is solely with reference to the manner of election, and an election can only be set aside, when not performed according to the forms of law. The members elect of the different school committees also need the approval of the Board of Education, or rather of the delegates appointed for the district. Where no definite election is made by the district or parochial committee, the Director of Education makes temporary appointments from the number of candidates for teachership. All definite appointments at primary schools, the teachers' seminary, the school of the canton, the veterinary school, and the professorships at the high-school, are for life; those for the secondary-schools are generally for a term of six years. A teacher definitely appointed can not be deprived of his position except by judicial sentence, or non-election on the expiration of his term of office.

State, commune and family coöperate to defray the expenses of public instruction. According to the latest reports, the contributions of the Canton of Zurich for purposes of public instruction amount to one-fifth of its total expenses.

Since all funds and benefactions for special objects of education or for the maintenance of superior schools have been sequestered by the State, to form the general school funds, the total of expenses of superior schools (as far as fees of instruction and contributions of the most favored communes render necessary,) are defrayed from the treasury of the State, as also the amounts granted in aid of public instruction. The different primary and secondary schools have their own funds, administered by officers who are at the same time treasurers of the parochial communes, subject to the control of the district inspector.

I. PRIMARY SCHOOLS.

The Canton of Zurich, in all its communes, has 471 day schools, with 28,030 pupils. Repetition schools and singing schools are in charge of the same teachers; in the year 1852-53 the total number of scholars was 20,796.

The primary schools of the different school communes are divided or undivided schools. If a division becomes necessary, it is generally so arranged that one teacher officiates at the elementary school, and another at the real school. Where the schools are undivided, the elementary class, that of repetition and of singing, are under one person. A division must take place whenever the number of pupils has increased to one hundred and twenty. During each year, vacations of from four to eight weeks are prescribed by law; also the number of lessons per week is fixed for day schools at twenty-seven, for the repetition-school at six hours. In order to effect a regular attendance at school, the following means are used :—

The teachers take notice of absentees every half day; those who have not the permission of the teacher or of the president of the school com-

mittee, fall under the head of "culpable." To come one quarter of an hour after commencement three times, is considered, if without excuse, as absence without leave. The teacher or school committee may demand in writing from the parent or master of the scholar, the cause of his absence without leave; if the parent, etc., should be convicted of misstating the reasons of absence, a public censure before the school committee is the first remedy, and upon repetition a fine of from one to four francs. If the pupil of a day-school is absent without proper excuse three times during three scholastic months, the teacher must report such fact to the school committee, and the latter inform the parents, guardian or master. If the same scholar absents himself again three times during the same quarter, the parents, etc., are summoned before the school committee; and if this culpable absence occur a third time, the committee impose a fine of from two to eight francs. During the second quarter no notice is sent, but the parents, etc., are summoned immediately before the committee, if they have been exhorted or fined within the preceding three months; and instead of a third notice a summons before the committee is immediately served, and instead of a third summons the fine is imposed without delay. In schools of repetition and singing, culpable absence, twice within six months, is followed by notice to the parents; if again occurring, by a summons before the committee, and if not remedied yet, by a fine of from two to eight francs. If the parent, etc., does not pay due attention to the summons, an extra fine of one franc can be imposed. All fines flow into the school fund; if not paid within a certain time, they are levied by process of law. If children move into another district, their absence from school must be entered on their certificate.

In the year 1850-51, the total absentism of day-scholars was 372,940 with excuse, and 43,428 culpable; in the year 1851-52, 343,083 with excuse, and 52,456 culpable, so that at average each pupil has been absent nine to ten times.

No factory is permitted to employ any child which has not passed the day-school, during a time when instructions are given; and the pupils of a repetition-school or singing-school must be allowed a regular attendance in those classes by their employers. Boys and girls who have not reached the age of sixteen years, shall not be required to work beyond fourteen hours per day.

Sexes are not separated in any primary school. Classification in the day-school is according to age; in the first class of the elementary-school, children from six to seven years are admitted; in the second class, those from seven to eight years, etc. The teacher of an ungraded school in this manner must engage often six different classes, and it becomes important for him to say much in few words, and while he instructs one class, to give suitable occupation to the others. An examination decides whether children at the age of twelve years will pass into the repetition-school or remain longer in the real-school.

The object of primary schools in the selection of branches and methods of instruction aims at this:—"to educate the children of all classes after uniform principles, and train them to become intelligent, active, useful, moral, and religious persons." This they try to accomplish by the following plan of instruction:—

1. Elementary instruction, (6-9 years of age.)
 - a. Reading and writing, with special regard to the development of memory, the ability of speech and thought.
 - b. The four principles of arithmetic.
 - c. The elements of music (singing.)
 - d. Biblical histories, as suitable for infant minds.
2. Real school, (nine to twelve years.)
 - a. Exercises in composition and language.
 - b. Elements of grammar, by framing sentences.
 - c. Practical arithmetic.
 - d. Selections of practical geometry, more calculated to form the geometric eye, than for strictly scientific study.
 - e. History and geography, chiefly national.
 - f. Natural history, philosophy and physical geography in regard to agriculture and mechanics.
 - g. Biblical history, Christian morals, development of the æsthetic by instruction in singing, drawing, etc.

Religious instruction is imparted in the day-school by the teacher, in the repetition-school by the pastor. The singing-school is at the same time the class of catechumens.

The matter of instruction is distributed among the different classes, as follows:—

Elementary School.—During the first year the aim should be only to develop the senses and the understanding. Instruction in language comprehends the training of the organs of hearing and of speech by pronouncing elementary sounds and syllables, the resolution of the latter into sounds, the knowledge of printed and written letters, words and syllables. Instruction in arithmetic has for its object a correct idea of number, exercises in the value of fundamental numbers (1-10) by addition and subtraction, and a knowledge of numerical signs. Drawing and writing should exercise the eye and hand, and instruction in religion should be limited to quickening the moral and religious sensibilities by simple narratives.

During the second year, instruction in language proceeds to reading of simple sentences and easy histories; arithmetic extends the previous exercises to units, tens and hundreds; in drawing, after points and lines in the first year, the pupils may learn about angles, etc.; in religion, they will aim to cultivate the moral and religious sensibilities.

The third year should complete the formal elementary instruction, viz.: in language, to the reading of descriptions and histories, hymns, etc.; in arithmetic, multiplication and division by the fundamental numbers

(1-10) of hundreds, tenths and units; in mental arithmetic, practical problems; in drawing, straight and curved lines, curvilinear figures; in religion, interpretation of Bible verses, etc.

Real School.—In this grade the school instruction is more specific. Instructions are required of a general kind; yet all branches must be studied in the national language, which must be used for practice in thought, speech, and writing.

In the fourth year of the elementary course, the instruction in language proceeds to definitions in grammar and part of etymology. In arithmetic, the multiplication and division is continued in numbers of three figures, and the four ground rules in denominate numbers. In geometry, lines and angles are explained, so as to show to the eye of the scholar geometric form and properties. Of the real sciences the plan of this year incloses: Geography of the Canton of Zurich and of Switzerland; selections from general history; descriptions in natural science. Instruction in singing includes rhythmical exercises and the first principles of method; drawing aims at a quick eye and a steady hand, having regard also to the improvement in penmanship, particularly to German current hand. In religion a catechetical instruction in Old Testament history is given.

The fifth year completes in language the grammar on etymology and syntax; in arithmetic, all operations with fractions; in geometry the peculiarities of the square, sphere, and parallels; weights and measures. The history of Switzerland and an introduction into general geography belong to this course; in singing, practice of melodic and dynamic exercises; drawing and writing from copies, and after more difficult sketches; religion, embracing the history of the New Testament.

The sixth year embraces the complete course of grammar, syntax, business correspondence, plane surveying, selections from natural history and philosophy, singing, more difficult copies in drawing and writing in German and Latin text; instruction in religion so as to interpret difficult passages of Scripture, etc.

In the *Elementary School*, fourteen hours are devoted to language; five to arithmetic; five to geometry; three to religion. In the *Real School*, twelve hours are given to language; four to arithmetic; two to geometry; three to selections from natural history and philosophy, etc.; four to drawing, writing and singing, and two to religious instruction.

The *Repetition School*, occupying only six hours in the week, aims at a careful review of the most essential parts of the previous course. The singing school, in which once a week the pupils of the repetition-school and the catechumens are collected and taught in reference to church singing.

Obligatory school-books are selected in the following manner: A work is sent to the Board of Education for examination; or the Board requests a person, who from his pedagogic experience and position as teacher commands their confidence, to prepare a school-book after a plan indi-

cated. The manuscript is then examined by a committee of experts, who may suggest alterations, and finally, indicate a partial acceptance. The author is allowed a fixed sum for the copyright by the Board. The book is printed, and each public teacher is furnished with a copy. After it has been some time in the hands of the teachers, a meeting of the teachers' chapter is held, for consultation on its merits: each chapter elects a representative, and the representatives of all the chapters, at the call of the senior member, assemble in Zurich, where, after a thorough discussion, and by a free and independent vote, (they receive no instructions from their electors,) they either recommend the book for adoption as an obligatory means of instruction, or for modification in certain points, or reject it altogether. Their resolution is presented to the Board of Education, which takes a final decision, generally in accordance with the vote of the teachers. Religious means of instruction are submitted also to the approval of the church council. The expense of delegates of the chapters while away from their homes, and corresponding to the distance from Zurich, is defrayed. The composition in type is preserved until the decision from the Board of Education is made known; in the latter years the State has undertaken the publication of some school-books, and found that this could be done at very little expense, so that for instance a little volume of two sheets comes to five cents.

The course of education of primary teachers is generally as follows:—Primary school, secondary school, Seminary. In order to secure a sufficient number of able young men for the profession of teachers, a preparatory institute has been established by the State. Every pupil of a secondary-school at the age of fourteen years can present himself to the district committee for examination as candidate of teachership. His examination, made by a special commission of that committee, shall be chiefly with regard to mental ability and physical constitution. The Director of Education selects from the candidates proposed by the district committee. Every year a candidate is admitted from each district; and if there is no candidate from one district, the place is filled from the names of the examined of another district. Each pupil of a secondary-school, who is approved as a candidate for teachership, is paid a yearly subsidy of forty-six francs, sixty-seven centimes, upon the recommendation of the director of the Seminary, based on the teacher's report of the conduct and progress of the pupil, rendered each semester.

The admission into the Seminary, and the granting of free scholarships, takes place in the order of the date of registry of the candidates examined and approved.

In the Spring of each year an examination is held for those who wish to obtain the qualification as primary teacher, and for those desiring to obtain a certificate of a higher degree. Strangers are admitted to these examinations, and whoever gives satisfaction can obtain the certificate, no matter what his course of education has been. Admittance is refused only to those who failed at three previous examinations; those who have

been by law deprived of municipal privileges, and those who are unfit for the profession on account of defects of the body. Applications must be made to the Board of Education. The examination is extended on all branches of primary schools, and consists of oral, written and practical exercises; an examination in writing is had only in regard to language and mathematics. Trial lessons may be dispensed with, if the recommendations and certificates of the candidate warrant an exception. The examination is public, and the teachers of the Seminary are the examiners, in conjunction with experts appointed by the Board of Education, from its members or from other teachers. The expert as well as the examiner, after examining a candidate, mark down the result by figure I., II. or III. From these figures and those affixed to the written examination, the total of the certificate is made up by the examining commission, which makes proposal to the Board of Education, in the case of each candidate, as to his non-admission, or to a certificate No. I., (very able,) No. II., (able,) or No. III., (conditional.) The Director of Education issues the certificate in the name of the Board, and the candidate is in possession of the same within a few days after the examination. The members of the examining commission are allowed mileage, etc.; but no charges are made to the candidates. One or more candidates may have an extra examination, for which two members of the Board of Education are appointed. These extra examinations also are gratuitous for candidates of primary schools, but candidates for secondary-schools must defray expenses.

Those who obtain certificate No. III. can pursue a Course of Completion; the pupils of this course are instructed by the teachers of the Seminary, from the beginning of May to the end of July, chiefly in the practical use and theoretical methods of the obligatory studies. At the end of the course an examination is held for those who desire to obtain a better certificate; but no one is forced to subject himself to this examination if he chooses to return with certificate No. III., in which case he is liable to be called upon to take part in a future Course of Completion. The scholars of this course are all teachers in office, for a candidate, after passing this examination, generally finds a temporary or definite engagement. Teachers without means receive a contribution from the State, towards the expenses of a deputy and of their residence at the Seminary. The teachers of the Seminary are paid extra for the Course of Completion.

A public-school teacher can hold only certain offices of the Canton or districts, viz.: 1. that of a member of the Great Council; 2. that of a member of the district or parochial school committee. Other offices can be accepted by the teacher only with permission of the district-school committee, which is granted when no disadvantage arises to the school from duties required of such office.

No teacher of the Canton is required to perform any public duty not immediately connected with his profession.

The teachers of Zurich as a class are organized into chapters and a

synod. Primary and secondary teachers compose the chapter; and these together with all the other public teachers form the synod, which thus unites all the teachers of the primary, secondary and high-schools. The chapter usually meets once every three months, and may meet oftener. The place of meeting varies, but must always be in a school-house. All the members of the chapter are obliged to attend; the proceedings of the chapter are not public; officers are elected for two years, and consist of a president, a vice-president, and a secretary. Every member of the chapter, who has not been a public teacher of the Canton during fifteen years, is required to furnish to the president annually a composition in writing on a subject selected by himself. The proceedings of the chapter must occupy at least four hours; they are opened by singing, which is usually followed by some practice in teaching; after which the pupils of the school withdraw, and a discussion on the previous practice and method begins. A discourse of an educational character, followed by a criticism and discussion, and if time permits, on some subject of pedagogy, are part of the regular proceedings. If occasion demands, opinions are expressed on books of instruction, the election of members of the school committees, of officers of the chapter, deputies, librarian, etc., takes place, and scientific lectures are given. Each chapter has a library, for the increase of which the State pays thirty francs per year. A librarian, elected by the members of the chapter, superintends the same. The presidents of chapters assemble annually in Zurich to deliberate on the order of the meetings for the next year. The Board of Education presents a subject for prize composition every year, for which every public teacher may compete. One school in every district is declared the model school, and is selected annually, according to the report of the district committee, by the Board of Education. Each model school receives from the State an annual sum for the increase of its means of instruction and an addition to the teachers' salary. Candidates, *i. e.*, members of the chapter, not definitely appointed, and teachers with certificate No. III., are required to visit the model school; they are also required to present themselves once in a year before the president of the chapter, and render an account of their private studies for further improvement in knowledge, which generally give satisfactory results. All elections in the chapter are by secret ballot, except those for temporary committees. In the last meeting of the chapter preceding the assembling of the synod (last Monday in August,) the "wishes and instructions of synod" are considered, and a deputy to the synod is elected. All the deputies from chapters meet on the evening preceding the meeting of the synod, at the place where the latter is to be held, and thus form the pro-synod; they decide finally on all subjects and petitions of the chapters which shall be the order of the day in the proceedings of the synod.

On the morning of the day of meeting of synod, the members are called to church by a ringing of bells. Singing, a short prayer, and the address of the president open the session; the members who take part

in the assembly (which is not obligatory,) are required to appear dressed in black cloth. The Board of Education is represented by three deputies; the members of district committees can attend as advisory members; the public are admitted. The opening is followed by the reception of new members, the report of the Board of Education on the progress of schools, the report of the director of the Seminary on the labor of the chapters, and the reports of committees. The two first reports are generally ordered to be printed. Next follows a pedagogic lecture, a criticism and discussion of the same; these lectures (always written) are delivered according to a fixed programme, and the meeting can order the publication of lecture and criticism. A pamphlet, containing the proceedings of the school synod, the reports, and sometimes the lecture, is furnished gratuitously to each member. After the debates mentioned above, resolutions are passed with reference to the petitions and wishes of the synod to be presented to the Cantonal authorities; finally the election of officers takes place, whenever the terms of any of them are expiring, or of such as are elected by the synod; also the selection of special committees. The synod elects a president, vice-president, secretary for two years, not to be reelected, two members of the Board of Education, and the members of special committees. The meeting is closed by singing. The place where synod is to be held is changed every year. The budget of the State is charged with a certain sum for the expenses of printing, etc., of the synod. Extraordinary meetings of synod may be held, upon resolution of the synod or of the Board of Education, or upon the demand of three chapters. A committee of the school synod of Zurich has published a collection of songs for male choirs and one for mixed choirs, music and poetry in part by Zurich teachers, which are distributed all over Europe on account of the fine selection and the unexampled low price. In some parts of the canton they have a voluntary teachers' union, the members of which meet every two or three weeks, and in an afternoon session labor for their professional improvement. In these meetings they make extempore speeches on subjects of instruction, experiments in methodic and practical teaching, criticism of new books, etc.

Each school has its treasury and a fund (*Schulgut*) administered by the school administrator, who is elected by the commune for the term of four years, and can be reelected. Every member of the school commune is eligible for this position; but the office gives no salary. The interest accruing from the school fund only is used, and forms one item of the revenue of schools for current expenses. All the citizens of a community are members of the school commune in which they reside; those who acquire citizenship must pay a certain sum in order to become members of the school commune, proportionate to the amount of the fund. Into this school fund, according to law, are paid:—

1. All ground-rents and tithes, if any existing.
2. Fees of immigration, which means a sum paid when a member of

the commune marries a woman belonging to another commune, which sum is considerable if the wife is from another country. (For a Swiss woman it amounts to four francs, for a German to forty francs.)

3. Fees of marriage, amounting to two francs at least.

4. Voluntary school tax, the proceeds of a collection on one Sunday in the year, when a sermon is preached in all the churches on Education, and which is distributed among the schools of a parish in proportion to the number of pupils.

5. Voluntary contributions and donations.

6. Legacies.

As all these receipts flow into the school fund, while the interest of the principal can only be expended, an increase is very wisely provided, and accrues from year to year.

In the year 1850-51, the total of school funds in the Canton amounted to 225,791 francs, 73 centimes; in the year 1851-52, to 230,415 francs, 81 centimes. Besides the interest of the fund, the school treasury receives the proceeds of public lands, fees for tuition, fines, part of the fees of settlement in a commune, contributions from the State, and taxes. From the treasury are paid: salaries of teachers, pensions, means of instruction, care, heating, repair and building of school-houses, interest on debts, and other current expenses. If the receipts are smaller than the expenses, the school commune may order a general tax, of which three-fourths is levied on the income, one-eighth in equal parts on all citizens, and an eighth in equal parts on all householders. The fee of settlement depends on the value of the property of a commune, and one-third of this fee goes into the school treasury, one-third into the fund for the poor, and one-third to the commune.

For each pupil of the day-school, one shilling per week is paid; for each pupil of the repetition-school, half a shilling. (A shilling is 85-100 francs.) This school fee is paid from the fund for the poor, when the parents have no means, and are depending on charity; if the parents are poor, but not depending on charity, the State pays part of the instruction, and school-books for their children. Though children do not attend the school of the commune, yet the fees for tuition must be paid as long as they are required by law to attend school. The fees of tuition form a part of the teacher's salary, but they are collected with other taxes and paid to the teacher by the administrator. The school commune is obliged to pay annually one hundred francs towards the teachers' salary, to furnish him two cords of wood, a suitable residence, and a piece of garden land, or in place of these, an amount of money to be fixed by the school committee. The communes are not obliged to pay pensions to teachers, and do this voluntarily only to deserving teachers, or when, in case of dissatisfaction not justifying a removal, but making the suspension of the teacher desirable, they have purchased the latter at the price of a pension. As a general rule, pensions are paid by the State, in consideration of age, years of service, previous salary and usefulness of the person.

The maximum of pensions is one hundred and sixty francs. Moreover the State gives aid to thirty or forty old teachers, who are still in service, when they need a temporary assistant, by sums of forty to sixty francs per year; and the two oldest teachers of the Canton receive a yearly subsidy of twenty francs, which are taken from the interest of a fund bequeathed for this purpose by an unknown friend of the schools.

To the fees for tuition and the contribution of the school commune must still be added a third part which the State pays towards the salary of teachers, and which till 1850 amounted to one hundred francs for each teacher. During the year 1850 the salaries of teachers were increased, and whenever the same, as derived from the State, (one hundred francs,) the commune, (one hundred francs,) and half of the tuition fee, does not reach the sum of three hundred and sixty francs, the deficit is made up by the State. It has also been resolved that after ten years of service, the minimum of a teacher's salary shall be four hundred francs; and be increased according to age and the number of pupils.

In the Canton of Zurich, the sale of salt is a monopoly of the State, and from the profits resulting from it in each commune, six per cent. is paid into the school fund; the sum thus realized is distributed by the school committee to the different school communes, in the ratio of the number of their pupils, and may be incorporated into the school fund or used for current expenses.

Finally the State devotes annually twenty thousand francs for the purpose of, 1. to facilitate improvements in instruction, and for the benefit of the school in general when necessary; 2. to contribute towards the fees of tuition for children of poor families, and their school-books, which latter are given gratuitously or at a moderate price; 3. to encourage school communes of limited means to introduce modern improvements. In distributing these contributions among the communes, the following questions must be answered by the school committee:—

1. Would there have been a deficit in the treasury of the school commune for the year ending December 31st last, if the *receipts* were derived solely from the interest of the school fund, rents of estates, sale of products, fees of tuition, fines, fees of settlement; and the *expenses* had been only for teachers' salaries, pensions, cost of means of instruction, heating and repair of school-house, interest on debts, and minor current expenses? How large would the deficit be in this case? If this deficit should be made up by a general school-tax, how much would be imposed per thousand francs of property, or would have to be laid on each household and on each citizen?

2. How many pupils of parents, not depending on charity, but poor, and who pay not more than one franc of State tax per year, have attended the day-school, repetition and singing-school during the last three months?

3. Have special efforts been made, during the last year, in the school-district, for the promotion of school matters? What was the object of these efforts?

When an affirmative answer is given to question No. 3, the following is added :—

4. What was the total number of pupils in the day-school, the repetition and singing-school, and the amount of taxable property in the school commune at the end of the scholastic year?

The duty to provide suitable school-houses rests upon the school commune. Freeholders are required to contribute for the building of the school-house in the place in which they reside; other citizens are taxed for the school-house in their home, that is, the place in which they hold citizenship. There are distinct regulations existing with regard to the details in the arrangement of new school-houses, as for instance on the selection of the building lot, description of school-rooms, seats and desks, etc., residence of the teacher, partition of the building, style and material, etc.

A school-room for 100–120 pupils must be of 1062 13-16 square feet, not less than ten feet in height; the windows six feet high, and four feet wide. The teacher's residence must occupy one half of the building, and must contain a study, kitchen, two chambers, a cellar, woodshed, etc. Lightning rods must be attached to every school-house.

When the frame and roof is completed, the commune can petition the State for a contribution, for the purpose of erecting a residence for the teacher, showing by accounts properly verified, and attested by the different school-committees, the cost of the building thus far, and also the condition of the property of the commune. In the year 1851–52, four thousand three hundred and two francs were granted for such purposes by the State; at the end of that year, three hundred and forty-one school-rooms were reported as in good condition, ninety-eight as tolerably good, and thirty-one as not satisfactory.

II. SECONDARY SCHOOLS.

By the establishment of secondary public schools, the State has gratified the desires of those parents who wish to give their children of the age of twelve years an education beyond that of primary schools, or to prepare them, in the vicinity of their homes, for the studies of the superior schools. The main object of the secondary-school, however, is a better general education of the people, not to prepare for professional or high-schools. According to the intention of the founders of these schools, they should aim at training a class of intelligent citizens, who would be able to become leaders in public life or suitable members of the school-committees; while the plan of instruction in primary schools embraces language, number, form, art, religion. The different branches of science appear more distinctly in the plan of secondary-schools. Yet the secondary-school teacher who would introduce an abstract system of distinct

Notes.—The author observes here, that there is a popular current in favor of some modification in the school organism. For instance, the office of Cantonal Inspector should be created; the preparatory school of the Seminary should be discontinued, and the course at the Seminary extended to four years, etc.

parts of science, would not fulfil the object of his school, which is rather more to select useful and instructive matters of science, and to present them in a striking and direct manner, with the vivacity peculiar to the people. The subjects of instruction in the secondary-school are: Religion, the German and French languages, arithmetic and geometry, history and geography, natural science, drawing, penmanship and singing. All these studies, except the French language, are obligatory upon all pupils.

A distinct plan of instruction, binding on all teachers, does not exist; the peculiar demands of each district are taken into account, perhaps more than is beneficial.

Each scholastic year in itself shall offer something complete, some total part of science, which however must be arranged so as to form a basis for the instructions of the next year.

This demand, which is difficult to observe, is made by the law, in order to give a kind of finished education to those who can attend this school but for one or two years. The complete course is for three years; those who attend the secondary-school for two years are no longer required to join the repetition-school. Usually the secondary-school is divided into three classes; the hours of instruction are thirty-three per week, and vacations of seven weeks per year. As boys and girls enter the secondary-schools, a division into more classes often becomes necessary, since many branches can not well be taught to both sexes alike. Notwithstanding this, however, a teacher of a good secondary-school gives to his pupils the same instruction that can be obtained in the three or four classes of a higher burgher-school in Germany from a number of teachers. It frequently happens that talented pupils from the highest class of the secondary-school are admitted in the first class of the lower school of industry, or after some private study, into the lower class of the upper school of industry. The forty-eight secondary-schools of the Canton are so distributed as to be accessible to all; they were attended during the year 1851-52 by twelve hundred and sixty pupils. Where the number of pupils is large, or when several districts unite their means, several teachers are engaged, who divide the several branches of instruction among themselves according to their preference. Those who enter a secondary-school must be twelve years old, and are required to prove, in an examination, that they have obtained the knowledge imparted by primary schools. The teacher has a vote in the decision of the examining committee. The fee of tuition amounts to sixteen francs for each pupil, and goes into the school fund. Whenever the condition of the school permits, four free scholarships must be granted.

Almost all secondary teachers obtain their professional education at a seminary; next they take their residence for some time in the French cantons of Switzerland, in order to acquire a perfect knowledge of that language. There are also secondary teachers who never attended a seminary, but attended the instructions at a cantonal school, a polytechnic

school, or a high-school, etc. In order to become qualified as secondary teacher, a satisfactory examination is all that is required; the examining committee consists of the teachers of the Seminary, and one expert for each branch appointed by the Board of Education. Strangers are admitted to these examinations. Except mathematics and the two languages, the candidate may decline examination in one branch; but if he gives satisfaction in all the other branches, he will obtain the qualification of secondary teacher. One who does not pass the examination satisfactorily in mathematics and languages, obtains only a qualification for certain branches, and may be engaged for these branches as assistant of the teacher of any school, but he can not take the sole charge of a secondary-school himself. The certificate of examination contains a note on the efficiency of the candidate in each branch of secondary instruction.

Uniformity of books and means of instruction have not been secured in the schools of Zurich; efforts are made in this direction. The approval of the Board of Education is required, before any work can be introduced into schools.

All secondary-schools have a school fund (*Schulgut*), made up from contributions of the State, private donations, and increased here and there by foundations for the benefit of higher schools. From the year 1838 the State made annual contributions to each of the fifty secondary school-districts for the purpose of establishing secondary popular schools, at first to the amount of three hundred and twenty francs, and since 1836, of seven hundred and twenty francs, and the withdrawal of this amount was threatened if a secondary-school were not established and in active operation in the district in the year 1840. Several districts organized their school in 1839, when a considerable school fund had accrued from the regular contributions and the interest thereof. The State still continues the contributions; thus the receipts of a secondary-school are derived from: 1. the State (seven hundred and twenty francs;) 2. the interest of the school fund; 3. the fees of tuition. In 1851-52, the amount of school funds in the Canton was 230,415 francs, 31 centimes. At first, from doubts of the permanency of secondary-schools, teachers were engaged for a term of six years; this fear has disappeared, and their office is now for life. Each secondary teacher receives from the school fund eight hundred francs, and a free residence, or in place of it an additional sum of one hundred francs. The school committee can make additions to this fixed salary. The administrator of the secondary school fund is nominated from the members of the school committee. Instruction in religion is usually given by the resident pastor; and a remuneration made for his labor. Assistant teachers for singing, penmanship, etc., are to be paid by the teacher of the school; the latter may occupy the position of resident pastor or assistant pastor, together with that of secondary teacher.

City Schools of Zurich and Winterthur.

The city schools of Zurich embrace the *primary* school, *secondary*

classes, and a *special school* for the poor. The schools of Winterthur also embrace a *primary school* (two divisions, one for the sons of citizens, the other for the children of residents,) a *gymnasial class*, and *one class of a school of industry* (about equal to the lower class of the gymnasium and the school of industry of the canton,) and a *technical school*. In all the city schools the system of classes and sexes has been introduced. At the end of the year 1851-52, the city schools of Zurich numbered forty-six teachers and seventeen hundred and fifteen scholars; those of Winterthur, thirty teachers and one thousand and nineteen scholars. Both cities have a school board, who superintend the schools in the same manner as the parochial school committee, and sustain a relation to the Board of Education similar to that of the district-school committee. The school board in both cities is composed of thirteen members, elected by the school commune, or by the city council (in Zurich.) Two members must be elected from the teachers, and two from the pastors, for the school board of Zurich. In Winterthur, two members are elected from the citizens, and the rector and chief pastor of the city are *ex-officio* members of the board. In both cities the teachers of city schools form an association, and the school board asks for the advice of this association in all school matters. Teachers are elected by the city commune, from candidates proposed by the school board. In 1851-52, the school fund of the city amounted in Zurich to 615,582 francs, 94 centimes; in Winterthur, to 583,383 francs, 28 centimes. Preference is shown to the children of citizens in regard to conditions of admittance.

III. SUPERIOR OR PROFESSIONAL SCHOOLS.

The Cantonal Schools.

The schools of the Canton include the Teachers' Seminary, the School of Agriculture, the Veterinary School, the Cantonal School and the High School (University.) The name of superior schools comprehends the three last named.

There is a cantonal school treasury, under the supervision of the school administrator. This treasury receives:

1. Fees of tuition and of registration (cantonal and high-schools).
2. Contributions from the State and the city.
3. Duties on stamped paper (containing a certificate of the health of cattle brought into the city,) which are part of the receipts of the veterinary school.
4. Annual contribution of the city of Zurich. Its amount has been twenty thousand francs per year since 1836, when this sum was granted in order to secure the location of the schools in Zurich.

The costs of maintaining the school buildings and furniture are defrayed by the State directly; other expenses are paid from the cantonal fund, and if that is not sufficient, the State furnishes what is necessary. Thus the expenses of cantonal schools are paid entirely by the State, since the cantonal treasury is but an auxiliary of the former.

The cantonal schools (with exception of the Seminary,) have in common a library, composed of the books of the ancient convent, of the university, of the gymnasium, of the school of industry and the veterinary-school.

For the increase of the library, each faculty of the high-school and each committee of teachers of the other schools draws a fixed amount from the cantonal treasury. Beyond this the following contributions are to the same purpose: Voluntary donations made by professors; fees paid for obtaining academical degrees, etc. Each faculty of the high-school and each committee of teachers selects the books to be purchased for the library from their separate allowances. The general library is accessible to all members of cantonal schools; books suitable for students are carefully selected. The teachers of the Seminary pay an annual fee of four francs for the use of the library; others a fee of eight francs for the year.

The Board of Education disposes of a certain sum of money as yearly stipends for talented poor students of the higher schools; this sum is spent often only in part, and a reserve fund is formed from it, from which poor students are sometimes enabled to visit a foreign university. The total of stipends granted in 1858 was eleven thousand nine hundred and seventy-two francs; in 1851-52, eleven thousand five hundred and seventy-five francs, of which eight thousand one hundred and seventy-five francs were for students of the superior cantonal schools, and three thousand four hundred francs for six students in foreign universities. The amount of a stipend varies from sixty to one hundred and twenty, one hundred and eighty, two hundred and forty, three hundred and fifty or four hundred and fifty-five francs and more, and is left altogether to the discretion of the Board of Education, who decide on the relative abilities of the applicant, his morality and assiduity. Students receiving stipends are under special superintendence of teachers of the university, appointed for this purpose by the Board of Education.

Teachers' Seminary.

The Canton of Zurich has a Seminary for the training of well qualified teachers for its public schools. Conditions of admission in the Seminary are: The candidate must be sixteen years old, of sound health, and not deformed in body or deficient in limb; he must present creditable testimonials as to moral deportment, and in a satisfactory examination show the amount of knowledge of the programme of a secondary-school, in the following branches: 1. Biblical history; 2. German and French languages; 3. Arithmetic and geometry; 4. History; 5. Geography; 6. Natural history; 7. Singing, drawing, and penmanship.

Admittance is at first for a trial term of three months; afterwards, upon the recommendation of the teacher, a permanent registration is accorded.

Branches of instruction at the seminary are: 1. Religion and moral philosophy; 2. Pedagogics; 3. The German language; 4. The French language; 5. Mathematics; 6. History; 7. Geography; 8. Natural his-

tory; 9. Singing, and playing the violin; 10. Penmanship; 11. Drawing; 12. Gymnastics; 13. Theory of farming and practical work.

Instruction on the violin is not obligatory, but all other branches are. As an exception, students may be dispensed from participation in the gymnastic exercises. All instruction must be given with special reference to the future vocation of the students and to the special object and organization of public schools; and strict attention should be given to observe that the matter of instruction is thoroughly understood and well digested, and that the student is practiced in the treatment and application of each subject. The same principle should be followed in teaching pedagogics. There are three classes in the Seminary, but no class teachers; every teacher is selected for certain branches.

The course of instruction is three years, and resulting from this there are three classes. For practical training in teaching, a practice-school is connected with the Seminary, which in organization and labor should be a model of an undivided primary-school.

The commission of superintendence of the Seminary is composed of seven members, appointed by the Board of Education from its own members or from other persons, for a term of four years, so that two members are appointed every two years. This commission makes regular visitations at the Seminary; supervises the labor of director and teachers, the industry and deportment of the scholars; they approve plans of instruction and other propositions of the director, and his reports to the Board of Education. The director is an advisory member of this commission; other teachers may be consulted in its sessions.

The director, who must belong to the Protestant church, is elected by the Board of Education upon recommendation of the section for popular instruction, and his appointment must be approved by the Government council. His engagement is for life, though usually a trial term of two years precedes the permanent appointment.

The convention of teachers under the presidency of the director forms the immediate board of supervision; the plan of studies, the order and time of lessons, of certificates and censures of pupils, of their definite admission and promotion into higher classes, and the use of extraordinary means of discipline, are submitted to them.

The director receives a salary of twelve hundred to eighteen hundred francs, with board, residence, fuel, light, etc., for himself and family; every regular teacher is paid one thousand to fourteen hundred francs. An annual sum of four hundred francs is granted for means of instruction, and of four hundred francs for apparatus or tools for gymnastics or practical farming; as well as three thousand two hundred francs for the salaries of assistant teachers and the teacher of the practice-school.

In 1851-52, the number of pupils was sixty-two, of whom about forty reside on the premises. The students of the first and second classes are generally required to live in the Seminary. The expenses of thirty-nine pupils defrayed by the State amounted to six thousand three hundred

and thirty-eight francs, being an average of one hundred and sixty-two francs. Only one pupil received an entirely free scholarship, two others three quarters, twenty-four received one half, and two, one quarter of the expenses. Every student receiving stipends obliges himself to accept any position the State may confer upon him within the first two years after leaving the Seminary.

Cantonal or State Institution.

Immediately adjoining the day-school is the School of the Canton, divided into two divisions, Gymnasium, and School of Industry.

Gymnasium. The gymnasium has two divisions, the lower and the upper gymnasium. Branches of instruction in the lower gymnasium comprise: 1. Religion; 2. German language; 3. Latin; 4. Greek; 5. French; 6. History; 7. Mathematics; 8. Practical arithmetic; 9. Geography; 10. Singing; 11. Gymnastics.

There are four classes in the lower gymnasium, the course of each being for one year; scholars entering the lowest class must have attained the age of twelve years, and present a good testimonial from their former teacher; they are also subject to examination.

The branches of instruction in the upper gymnasium are: 1. Religion; 2. German; 3. Latin; 4. Greek; 5. Hebrew; 6. French; 7. History; 8. Mathematics; 9. Natural science; 10. Philosophy; 11. Singing; 12. Gymnastics.

The upper gymnasium has three classes; the course for each is of one year. Pupils entering the first class of the upper gymnasium must be sixteen years of age; for the second class, seventeen years, etc.; they are also required to give satisfaction in an examination as to their knowledge and moral deportment.

The Board of Education decides in regard to the distribution of branches of instruction, and the extent to which each science shall be taught. Teachers are engaged for the branches in which they are efficient; the system of class teachers has not been introduced.

The several teachers of the gymnasium form a convention (board) of teachers, which decides on the general course of instruction, the order of lessons and discipline, as far as the Board of Education has not already made decision; they express their opinion on the introduction of school-books, when invited to do so by the Board of Education. The president of the gymnasium is called rector, and he is intrusted with the management of the gymnasium in general and the upper gymnasium in particular; the lower gymnasium is under the special direction of a prorector. The rector is elected from the teachers of the upper gymnasium, the prorector from those of the lower gymnasium, by the Board of Education, for a term of two years, being eligible to reëlection.

Every scholar of the gymnasium pays four francs as a fee of registration, unless he has previously paid that sum at another cantonal school; each scholar of the upper division contributes two francs, and of the lower division one franc, towards the collections of the cantonal schools. The

tuition fee for the lower gymnasium is twenty francs, and for the upper gymnasium, thirty-two francs per year. A moiety of the tuition fees is divided among the teachers of the gymnasium engaged in the first and second classes, according to the number of lessons they teach.

School of Industry. The school of industry has two divisions: the lower and the upper school. Branches of instruction for the lower school of industry are: 1. Religion; 2. Mathematics; 3. Natural history and philosophy; 4. German; 5. French; 6. History; 7. Geography; 8. Practical arithmetic; 9. Geometrical design; 10. Drawing; 11. Penmanship; 12. Singing; 13. Gymnastics.

The lower school of industry has three classes of one year's course for each; the Board of Education decides on the plan of instruction; a boy must be twelve years old before he can be received in the lower class, and have a good certificate from former teachers.

Branches of instruction taught in the upper school of industry are: 1. Theoretical mathematics; 2. Applied mathematics; 3. Natural philosophy; 4. Chemistry; 5. Natural history; 6. History; 7. Geography; 8. German; 9. French; 10. English; 11. Italian; 12. Drawing; 13. Geometrical design and drafting of machines; 14. Manufacture; 15. Commercial arithmetic and book-keeping; 16. Penmanship; 17. Singing; 18. Gymnastics. These branches are distributed by the Board of Education upon three years, in such a manner as to allow pupils who will devote themselves to technical or to commercial pursuits, to finish their course in three or two years respectively. A pupil who applies for admission into the upper school of industry, must be fifteen years of age; and if not coming from the lower division of the school, he is examined in all branches which need preparatory knowledge, and must be well recommended.

Pay and organization of teachers is similar to that of the gymnasium; teachers are selected by the Board of Education, and confirmed by the Government council. The teacher of gymnastics is engaged for a term of six years.

In 1851-52, the School of the Canton was attended: in the lower gymnasium by one hundred and twenty-seven, upper gymnasium by sixty-two; lower school of industry by one hundred and twenty-four, upper school of industry by sixty-eight pupils and twenty-one non-resident pupils.

The Veterinary School.

The course of the veterinary-school of the canton of Zurich embraces the following branches:—Natural philosophy; chemistry; botany; zoölogy; comparative, pathologic and surgical anatomy; physiology; dietetics; training of animals; general pathology and therapeutics; general, special and operative surgery; theory of infectious and contagious diseases; obstetrics; shoeing of horses; practice in treating sick animals, etc. A blacksmith shop and a hospital for sick animals are connected with the school.

The full course of this school is three years, and the above branches of instruction are suitably divided according to the plan of teaching. Teachers are elected by the Board of Education. A director presides over the veterinary-school, elected from the teachers by the Board of Education for the term of two years. There are two regular teachers, with a salary of twelve hundred to fourteen hundred francs, and assistant teachers are engaged as necessary, for which purpose, eighteen hundred francs per year are set apart, and for other incidental purposes, one thousand francs.

Boys of sixteen years of age can be admitted into this school, if they have attended a three years' course of secondary-schools or are otherwise qualified; they must pay a registration fee of eight francs, and a tuition fee of twenty-four francs, half of which goes into the school fund, while the other half is divided among the teachers in proportion to their number of lessons. Private teachers fix their own terms, with the approval of the commission of inspection. The latter consists of five members appointed for the term of five years by the Board of Education, one of whom must be a member of the Board of Education, and one a member of the board of health. They superintend the execution of all laws and regulations, as well as of the resolutions of the Board of Education in reference to this school, and see that teachers and pupils perform their duties.

The usual attendance is from twenty-one to twenty-five.

Agricultural School.

The agricultural-school was opened May 1st, 1853, and is the youngest one of the cantonal schools. The object, "to train young men in the theory and practice of agriculture," is pursued in part by formal instruction, in part by cultivating an estate near the city of Zurich. This estate belongs to the hospital of the canton, and is leased at a yearly rent of two thousand eight hundred francs. The Great Council granted to the Government council a credit of sixty thousand francs, at three per cent. interest, in order to enable them to give to the agricultural-school a proper outfit. The locality is calculated to accommodate thirty students; not more than ten new pupils shall be admitted at a time; they must pass a satisfactory examination before the commission of supervision. Two annual courses complete the term of the school. A citizen of the canton pays for board, tuition, etc., two hundred and fifty francs the first year, two hundred francs for the second year; others are required to pay three hundred and fifty and two hundred and fifty francs; two free scholarships are attached to the school. A director with a salary of one thousand three hundred and sixty francs, one teacher with a salary of six hundred and forty francs, and a master-farmer with a salary of four hundred francs, compose the board of instruction. During the Summer, three hours per day are devoted to instruction and eight hours to labor; during the Winter, six hours to labor and four hours to instruction.

The course of instruction embraces the following branches:

1. Arithmetic, problems from business life.

2. Geometry—measurement, surveying, drafting.
3. Mineralogy—different kinds of rock ; what parts fit for improving the soil ; springs and artesian wells ; order of stratas, petrifications, etc.
4. Botany—anatomy and physiology of plants ; forest trees, herbs for meadows, weeds, poisonous herbs, etc.
5. Zoölogy—anatomy and physiology of animals, chiefly of domestic animals ; useful and destructive animals.
6. Mechanics, as far as relating to agriculture.
7. Chemistry—soil and its associations ; analysis of soil, of manure, etc. ; fermentation, brewery, distillery, manufacture of vinegar, starch, soap, cheese, oil, etc.
8. Agriculture—knowledge of soil, manure, training of plants, of cattle, medical treatment of animals, book-keeping for farmers.

Instruction in the German or French language is not part of the programme, but may be given after the regular lessons. Practical labor is exacted in the field and the meadow ; the orchard and the forest ; in attending to the animals and repairing of harness, etc.

The agricultural school has from sixteen to twenty pupils annually.

The University.

This institution, which is always attended by over two hundred students, was founded in the year 1838, during the period of enthusiasm for instruction, and now occupies a distinguished position, being a realization of the ideal of a Swiss university, as nearly as this could be effected with the means of a small canton. We will here only indicate the peculiar points of its organization, which are not found at all universities :

A citizen of the canton, though admitted at another university, can be registered as a student, only if he has passed the final examination of the gymnasium or of the school of industry. Teaching and learning are free ; yet it has been provided in the interest of students, that recitations must be held on the lectures in certain chief branches. The degree of Master of Arts is not required of private lecturers at the university (*privat docenten* ;) they must obtain the permission of the Board of Education on the recommendation of the faculty, who may exact an examination from the candidate. Upon a favorable report of the faculty, a trial lecture must be delivered, after which, if satisfactory, the candidate is pronounced qualified as private lecturer (*docent*.) . .

The cantonal hospital is open to students of medicine.

Scientific collections are large and well arranged.

Private Schools.

All private schools in the Canton of Zurich are subject to inspection and control of the school committee of the district in which they are situated, and their plans of instruction must be approved by the Board of Education.

Federal Polytechnic School.

This great Scientific University is located at Zurich, but the Federal Government contributes \$45,000 annually to its support.

NORMAL SCHOOL

AT

KUSSNACHT, IN THE CANTON OF ZURICH.

THE Normal School at Kussenacht is about a league from the town of Zurich, and the buildings are prettily situated on the borders of the lake of the same name. This institution was re-organized in 1836, though the modifications made have been rather in the details than in the general principles. It now consists of a school for teachers, a preparatory school for this seminary, and three primary model schools. It is intended to supply teachers for the different grades of primary schools of the canton, and during a portion of the year lectures are also delivered in the seminary to the older teachers, who are assembled for the purpose in their vacations.

The superintendence and control of the Normal School is vested by the legislative council in the council of education, who appoint a committee of superintendence from their own body. This committee visits the school at least once a month, attends its examinations, and, in general, inspects its management. The executive power is delegated to a director, who has the immediate charge of the school, and arranges the plan of instruction, in subordination to the council of education. He examines the candidates for admission, inspects the classes of the seminary, and of the schools attached to it, and lectures in the school of repetition for the older teachers. He is also responsible for the discipline, and reports half-yearly the state of the institution to the council of education. He is moreover present at the meeting of the committee of superintendence. There are three other teachers, besides a variable number of assistants. These teachers in turn have charge of the pupils of the Normal School in and out of school-hours. There are conferences of all the teachers, at which the director presides. The manners of the people and the purpose of the seminary render the discipline of very trifling amount. The pupils of the Normal School reside in the village of Kussenacht, but spend the greater part of their time at the school, under the direction of its masters. All the time devoted to study, recitation or lecture, and regular exercise, is passed there.

To be admitted as a candidate for the Normal School, a youth must be sixteen years of age, and of suitable morals, intellectual, and physical qualities for the profession of a teacher. He must have spent two years in the higher division of primary instruction (called here secondary) in the model school, or some equivalent one, or have passed through the preparatory department of the Normal School, which gives a preference to the candidate, other qualifications being equal. The examination of candidates takes place once a year, and in presence of the committee of superintendence, or of a deputation from their body. The formal right of admitting to the school is, however, vested alone in the council of education. The subjects of examination are Bible history, speaking and reading, grammar, the elements of history, geography and natural philosophy, arithmetic and the elements of geometry, writing, drawing, and vocal music. The council of education fixes the number of pupils who may be admitted, and the most proficient of the candidates are selected. There are forty stipendiary places, ten of the value of one hundred and sixty Swiss francs, (forty-eight dollars,) and thirty of half that sum.

Natives who are admitted all receive their instruction gratis. If there is room in the school, foreigners may be received, paying twelve dollars per annum for their instruction. The number of pupils at the date of my visit, in the autumn of 1837, was one hundred and ten. The stipendiaries are bound to serve as teachers in the canton two years; a very moderate return for the education received.

There are two grades of courses in the Normal School, one of two years for pupils intending to become teachers in the lower primary schools, the other of three years for the higher, primary schools. The courses begin in April, and continue, with seven weeks of vacation, throughout the year. The subjects of instruction are: Religious instruction, German, French, mathematics, history, geography, natural history and philosophy, pedagogy, writing, drawing, and vocal and instrumental music. French is only obligatory upon the students of the three years' course. Gymnastic exercises and swimming are regularly taught and practised.

There is, besides, a lecture of an hour and a half on the art of building, once a week, attended by all the students. Those who learn instrumental music have lessons two hours and a half every week, and two hours or Sunday are occupied with singing in concert. One of the teachers devotes two extra hours every week to the assistance of some of the pupils in their studies, or to repetitions.

At the close of each year there is a public examination, and the pupils are classed according to its results. On leaving the institution, they are arranged in three grades; the first, of those who have gone very satisfactorily through the school, the second, of those who have passed satisfactorily, and the third, of those who have not come up to the standard. Certificates of the first two grades entitle their holders to compete for any vacant primary school.

The courses of practice begin in the second year, when the pupils take regular part in the exercises of the schools attached to the seminary. These are, first, two model schools for children from the ages of six to nine, and from nine to twelve, at which latter age the legal obligation to attend the school ceases. The third, called a secondary school, contains pupils from twelve to sixteen years of age. The system of instruction used in the lower schools is attended with very striking results. The lessons are not divided into distinct branches, studiously kept separate, as in most elementary schools, but are connected, as far as possible, so as to keep the different subjects constantly before the mind. Thus, a lesson of geography is, at the same time, one of history, and incidentally of grammar, natural history, of reading and writing, and so on through the circle of elementary instruction. The Pestalozzian lessons on form are made the basis of writing, and with good success. The lowest class is taught to speak correctly, and to spell by the phonic method, to divide words into syllables, and thus to count. To number the lessons. To make forms and combine them, and thus to write, and through writing to read. The second passes to practical grammar, continues its reading and writing, the lessons in which are made exercises of natural history and grammar. Reading and speaking are combined to produce accuracy in the latter, which is a difficulty where the language has been corrupted into a dialect, as the German has in northern Switzerland. Movable letters are used to give exercises in spelling and reading. The plan of the Pestalozzian exercises in grammar is followed, and when the pupils have learned to write, a whole class, or even two classes, may be kept employed intellectually, as well as mechanically, by one teacher. In reading, the understanding of every thing read is insisted upon, and the class-books are graduated accordingly. I never saw more intelligence and readiness displayed by children than in all these exercises; it affords a

strong contrast to the dullness of schools in which they are taught mechanically. The same principles are carried into the upper classes, and are transplanted into the schools by the young teachers, who act here as assistants. The examination of the second school in Bible history, with its connected geography and grammar lessons; in composition, with special reference to orthography and to the hand-writing; and the music lesson, at all of which the director was so kind as to enable me to be present, were highly creditable.

There are three classes in each of these schools, and the pupils of the Normal Seminary practice as assistant teachers in them at certain periods; the director also gives lessons, which the pupils of the seminary repeat in his presence.

In the highest, or secondary school, the elementary courses are extended, and mathematics and French are added.

The pupils of the preparatory department of the seminary spend two years in teaching in the two model schools, and in receiving instruction in the "secondary school" under the special charge of the director of the seminary. This establishment has furnished, during three years of full activity, two hundred teachers to the cantonal primary schools. These young teachers replace the older ones, who are found by the courses of repetition not able to come up to the present state of instruction, and who receive a retiring pension. The schools must thus be rapidly regenerated throughout the canton, and the education of the people raised to the standard of their wants as republicans.

COURSE OF INSTRUCTION			
NORMAL SEMINARY AT ZURICH,			
2nd Class and 2nd School year.			
1st Half year.	2nd Half year.		
<p>res on the Bible, with practical illustrations and references.</p>	<p>Lectures on the Bible, with practical illustrations and references.</p>	<p>ith above.</p>	<p>practical illustrations.</p>
<p>logy, and logical exercises, recitations, composition.</p>	<p>Repetitions of the more difficult parts of grammar, more extended compositions, laws of poetry.</p>	<p>The more important peculiarities of the German language, verbal expositions of the written exercises.</p>	<p>Further expositions of</p>
<p>used exercises of grammar and translation : grammar : syntax : conclusions of easy French : speaking.</p>	<p>Continuation of exercises in reading and translation : conclusions of easy French : recitations of easy pieces.</p>	<p>French and German respectively : composition.</p>	<p>More difficult applications of the preceding rules.</p>
<p>er exposition of the principles of triangles, of straight line figures.</p>	<p>The circle : elements of stereometry : easy questions in practical geometry.</p>	<p>Continuation of planimetry : plain and solid angles : projection of straight line figures : questions in the above subjects.</p>	<p>Polygonal figures : elements of trigonometry : practical geometry : projection of bodies with straight or curved surfaces : sections.</p>
<p>ry of Switzerland the beginning to the Westphalian Peace.</p>	<p>History of Switzerland as it bears on that of the rest of the world to the present period.</p>	<p>General history from 1389 to 1615.</p>	<p>General history from 1615 to the present time.</p>

Geography.	Introductory explanations, the ocean and continents, with their respective divisions.	The most important points of mathematical and physical geography.	Geography of Asia, Africa, America, and Australia.	More extended expositions of mathematical and physical geography.	Special geography of Asia, Africa, America, and Australia.
Natural History.	General introduction to natural history, description of elementary bodies, general characteristics of minerals.	Unmetallic minerals, metals, mountains, introduction to botany.	Systems of botany, description of plants, special information on the plants known to the pupils.	Introduction to zoology: classification and descriptions, introduction to the natural history of man.	
Physics.		The common phenomena of acoustics, optics, heat, magnetism, electricity.			
Geology.				Continuation of the above, special exposition.	
Writing.					
Drawing.					
Art or Teaching.					Further exposition of methods of instruction, and of the cantonal laws and regulations relative to schools, practical teaching in the primary school.

UNIVERSITY OF ZURICH.

PROGRAMME FOR 1866-67.

I. FACULTY OF THEOLOGY.

42 COURSES OF LECTURES A YEAR, BY 11 PROFESSORS.

INTRODUCTION to the study of theology; do. to the study of the Old Testament; Interpretation of the Psalms; Theology of the Old Testament; Introduction to the New Testament; Practical exercises on the Old Testament; Theology of the New Testament; Interpretation of the Book of Job; do. Prophet Isaiah; do. Minor Prophets; do. Prophet Zachariah; Elucidation of some of the most difficult texts of the Old Testament; Hebrew archæology; Geography and history of the Bible; History of the Canon of the New Testament; Interpretation of Jesus' discourses according to Matthew; Interpretation of the Gospel according to St. John; Synopsis of the four Gospels; Interpretation of the Acts of the Apostles; do. Epistle to the Romans; do. Epistle to the Galatians; do. to the Philippians and Philemon, with practical exercises; do. Timothy and Titus' Epistles; Interpretation of the seven Catholic Epistles on Jesus' doctrine; Conversation on several points of the New Testament; Exegesis on the Fathers of the Christian Church; Elements of dogmatics; History of dogmatics (2 courses;) Christian dogmatics; Practical exercises in dogmatics; Christian morals; Symbolics; Theory of church government; Catechetics; Practical exercises in catechetics; Practical exercises in homiletics; Liturgics; History of the Church (3 courses); Practical exercises on the same subject, embracing various periods, (3 courses;) History of Protestant theology (2 courses.)

II. FACULTY OF JURISPRUDENCE.

JURIDICAL, SOCIAL, AND ECONOMICAL SCIENCES.

49 COURSES OF LECTURES A YEAR, BY 11 PROFESSORS.

Philosophy of jurisprudence, or law of nature; History of the Roman civil procedure; Introduction to the study of law (2 courses;) History and institutes of the Roman law (2 courses;) Institutes of Gajus; Pandects; Contracts of the Roman law; Law of inheritance after the Roman law; Law of property: Law of buildings; Practical exercises in civil law (2 courses); Introduction to the study of law; International law; Common law among nations of German origin, embracing the law of Germany proper, the neighboring states of Switzerland, the Netherlands, and England; Explanation of the Mirror of Suabia; Procedure in common law (3 courses;) Practical exercises on the same; Laws of the Swiss cantons compared with each other: Private law of the canton of Zürich; Commercial law; Law of exchange (2 courses;) Law of insurance; Commercial jurisprudence in the common Germanic law (2 courses;) The same compared to the English and American law; Practical exercises on criminal law; Theory and history of commerce and manufactures; Theory of money, banks and science of finances (2 courses;) Elements of national economy; Science of police; National economy (3 courses;) Practical exercises on political economy; National economy applied to agriculture; Agriculture and manufactures in Switzerland; Constitutional law in general; do. of Switzerland; Laws of cities and townships.

III. FACULTY OF MEDICINE.

63 COURSES OF LECTURES A YEAR, BY 15 PROFESSORS.

Osteology and syndesmology (2 courses;) Human anatomy (2 courses;) General anatomy (histology,) (2 courses;) Dissecting (2 courses;) Repetitorium of anatomy; Zoology; Comparative anatomy; Medical physics, introductory to physiology; Inorganic chemistry; Organic chemistry; Pharmaceutical chemistry; Physiological chemistry; Materia medica (2 courses;) Physiology of the blood circulation, with a view to pathology; Special (medicinal) botany; Theoretical obstetrics (2 courses;) Sexual diseases of women; Obstetrical clinics (2 courses;) General pathological anatomy; Pathology and therapeutics of syphilis, with demonstrations; History of development of man; Practical microscopy (2 courses;) Human physiology; Physiological experiments on animals; Special pathology and therapeutics; Exercises in prescribing medicines; Medical jurisprudence (2 courses;) Same for lawyers; (2 courses;) History of medicine; Microscopical course of pathological anatomy; Pathological demonstrations and dissections; General therapeutics and special pharmacology; Pathological histology, with microscopical demonstrations; Pathology of the mouth; Special ophthalmia, (eye-lids, cornea, iris, lens, etc.) Ophthalmological clinic (2 courses;) Diseases of the ear; Practical operation for diseased eyes; Medical clinic at the hospitals (2 courses;) Polyclinic; Practical exercises in laryngoscopy and otoscopy; Eye-diseases of accommodation and refraction; Medicinal mineral springs; Theoretical and practical dentistry; Operative course in dentistry.

IV. FACULTY OF PHILOSOPHY.

157 COURSES OF LECTURES A YEAR, BY 38 PROFESSORS.

A. Metaphysical, philological, historical section.

a. Metaphysics, Pedagogics.—Logic and introduction to the study of metaphysical sciences; Logic and metaphysics; Psychology in general; Psychology viewed from natural sciences; Psychology in connection with pedagogics; Psychological exercises on the third book of Aristotle's work "On the soul;" Philosophical exercises on the first book of Aristotle's metaphysics; Philosophical ethics; Philosophy of religion; General history of religion; History of ancient philosophy; History of philosophy from Cartesius up to Hegel; Sense of hearing; Mental diseases (2 courses;) History of education, and the present state of the higher schools of Germany and Switzerland.

b. Philology, Archaeology—History of Literature.—Methodology and history of archaeology; Sanscrit and explanation of the Nala (2 courses;) History of Greek literature and drama; Pindarus; Æschylus' Perser, or the Seven against Thebes; Æschylus' Agamemnon; Sophocles' Aias; Sophocles' Philoctetes; Herodotus, Book I.; Thucydides; Plato's Gorgias; Plato's Symposium; Greek epigraphica, with practical exercises; Greek metrics; Explanation of selected fragments from the Greek; Ancient metrics; Explanation of Lucretius' *De rerum natura*, lib. I.; Explanation of Plautus' Pseudulus; Philological exercises (2 courses;) Terence's Andria and selected extracts from other comedies; Sallust's Catilina; Cicero pro Quintio; Cicero de finibus bonorum et malorum, with grammatical exercises; Selected poems of Tibullus; Exercises in grammar and writing Latin and Greek; Critical exercises in paleography; Comparative grammar of the principal languages of the Indo-Germanic nations; Sanscrit grammar (3 courses;) Elements of Sanscrit; Sanscrit Kālidāsa Meghadūta; Arabic (2 courses;) Mythology of the Germanic nations; Interpretation of the ancient authors; Interpretation of Hartmann's Iwein; The Edda; History of German poetry in the middle ages; Explanation of the poems of Walter von der Vogelweide; History of German literature from Klopstock's period; Practical exercises in speaking German; English grammar and exercises; Shakespeare's Hamlet explained and translated; History of English poetry from Chaucer to the present time; Byron's Child Harold, translated and explained; Exercises (oral and written) in the English language; Villehardouin,

Conquête de Morée; Explanation of the Chanson de Roland; Provençal grammar, with translations; Practical exercises in the French language.

c. *History, History of Art, Geography*—Synopsis of ancient history; Synopsis of the middle ages and modern history; General history of the 19th century; History of the French revolution up to the empire (2 courses;) History of Europe; Modern history, 1814-1848; History of Switzerland from the Reformation up to 1830; Survey of the works written on Swiss history; Helvetia under the Romans; History of Switzerland in the 17th and 18th centuries; Glance at the Swiss history in the 15th century; History of the Helvetic republic; Conversations on universal history (2 courses;) Historical exercises (2 courses;) History of geography (3 courses;) Russian possessions in the Northern regions; The British empire and its development in the five divisions of the globe; The Osmanic empire in the three divisions of the globe; The eastern region of China and Japan; Explanation of the sculptures in the museum of archaeology of Zurich; Political history of Switzerland.

B. *Section of Mathematics and Natural Sciences.*

● Elementary mathematics and elements of geodesy; Higher algebra; Descriptive geometry, axonometry and free perspective; Analytical geometry of space; Analysis of algebra; Introduction to higher mathematics; Analysis of complex numbers; Differential and integral calculus (2 courses;) Differential and integral calculus applied to geometry and natural sciences; Select portions of integral calculus; Introduction to celestial mechanics; Elements of astronomy and of mathematical geography, with practical demonstrations (2 courses;) Experimental physics; Experimental physics, heat, light, magnetism, electricity; Electro-dynamics and electro-magnetism; Elasticity and elastical vibrations, treated mathematically; Mechanical theory of heat; Exercises in physical experimentation for teachers; Repetitorium of physics in the German language; Same in the French; Mensuration of bodies for pupils advanced in mathematics; Experimental chemistry, inorganic; Same, organic; Selected portions of chemistry; Zoö-chemistry; Practical pharmaceutical chemistry, for druggists and medical students; Qualitative and volumetric analysis; Analytical, theoretical chemistry; Quantitative analysis; Theoretical chemistry (stoicheometry;) Practical chemical investigations in the laboratory; Same, for advanced pupils; Exercises in chemical experimentation for teachers; Compounds of cyanogene; Essential oils and aromatic compounds; Chemistry of daily life; History of chemistry; Practical instruction in chemico-physiological exercises; Mineralogy; Determination of mineral species; Crystallography; General geology; Practical geology and lithology; Chemical geology; General botany; Special botany, including official plants, with botanical excursions; Pharmaceutical botany; Vegetable physiology, with microscopical exercises; Fossil plants; Important plants in economy and manufactures; Diseases of cultivated plants; Fossil insects; Physical geography (2 courses.)

SWISS FEDERAL POLYTECHNIC SCHOOL, ZÜRICH.

PROGRAMME FOR 1856-7, ESPECIALLY THE FIRST HALF-YEAR.

SUBJECTS OF INSTRUCTION, CLASSED BY DIVISIONS.

FIRST DIVISION, OR SCHOOL OF ARCHITECTURE.

First Year.—1. *a.* Art of building, 3 hours; Thursday, Friday and Saturday, 10 to 11.

b. Architectural design and exercises on building, 3 afternoons, (6 hours per week in winter, 9 in summer;) Wednesday, Friday and Saturday, 2 to 4.

2. Mechanics, 6 hours; Monday, Wednesday and Saturday, 2 to 4.

3. *a.* Elements of differential and integral calculus, 4 hours; Tuesday and Thursday, 8 to 10.

b. Exercises on differential and integral calculus, 2 hours; Friday, 8 to 10.

4. *a.* Stone-cutting; and as introductory, theory of contacts and intersections of curved surfaces, 3 hours; Tuesday and Friday, 5 to 6; Saturday 6 to 7.

b. Drilling and exercises on stone-cutting, 1 hour; not yet determined.

5. Designing the figure, (5 hours in winter, 9 summer;) Monday, Tuesday and Thursday, 2 to 4, or 5.

6. Modeling in earth or plaster, 3 hours; Monday, 1 to 4.

In all, 16 hours of lessons; 16 to 22 hours of exercises.

Second Year.—1. Art of building civil edifices (continuation of course of construction,) 3 hours; Wednesday, Friday and Saturday, 11 to 12.

2. Art of building in middle ages and in the *Renaissance*. (During the second half-year, modern art of building,) 4 hours; Tuesday and Friday, 5 to 7.

3. Architectural design, sketches and detailed drawings of plans of buildings, (6 to 9 hours;) Tuesday, Friday and Saturday, 2 to 4.

4. *a.* Perspective and theory of shadows, 2 hours; Monday and Wednesday, 6 to 7.

b. Exercises on the same, 1 hour; not yet fixed.

5. Construction of roads and bridges, 3 hours; Tuesday and Wednesday, 8 to 9, and another hour not determined.

6. Theory of machines, 4 hours; Tuesday and Friday, 8 to 10.

7. Designing the figure, 2 or 3 hours; Monday, 2 to 4 or 5.

8. Modeling in earth or plaster, 2 to 3 hours; Saturday, 2 to 4 or 5.

In all, 15 hours of lessons; and 11 to 16 of exercises.

Third Year.—1. Art of building in the middle ages and during the *Renaissance*. (In the second half-year, modern art of building,) 4 hours; Tuesday and Friday, 3 to 7.

2. Drafting and detail drawings of architectural plans, 4 afternoons; Tuesday, Wednesday, Friday and Saturday, 2 to 4.

3. History of the Renaissance, 4 hours; Monday, Wednesday, Friday and Saturday, 5 to 6.

4. Designing the figure, 1 afternoon, 2 or 3 hours; Monday, 2 to 4 or 5.

5. *a.* Geology, 4 hours; Tuesday, Thursday, Friday and Saturday, 9 to 10.

b. Drilling on geology, 1 hour; not yet fixed.

In all, 12 hours of lessons, and at least 3 afternoons of exercises.

SECOND DIVISION, OR SCHOOL OF CIVIL ENGINEERING.

First Year.—1. Topography, 3 hours; Monday, Tuesday and Thursday, 10 to 11.

2. Designing plans, 2 or 3 hours; Monday, 2 to 4 or 5.
3. Elements of astronomy (for the first half-year,) 3 hours; Wednesday, Thursday and Saturday, 5 to 6; (Obligatory only upon pupils devoting themselves to the study of geodesy.)
4. *a.* Art of building, 3 hours; Wednesday, Friday and Saturday, 2 to 4.
- b.* Designs for building, 2 afternoons, Tuesday and Thursday, 2 to 4; (4 hours in summer, 6 in winter.)
- (These two items are obligatory only upon pupils devoting themselves to civil engineering proper, as roads, railroads, &c.)
5. Mechanics, 6 hours; Monday, Wednesday and Saturday, 8 to 10.
6. Designing machines, 1 afternoon; Friday, 2 to 4; (2 hours in winter 3 in summer.)
7. *a.* Elements of differential and integral calculus, 4 hours; Tuesday and Monday, 8 to 10.
- b.* Exercises on the same, 2 hours; Friday, 8 to 10.
8. *a.* Stone-cutting, and as introductory, theory of contact and intersection of curved surfaces, 3 hours; Tuesday and Friday, 5 to 6; Saturday, 6 to 7.
- b.* Drilling and exercises in the art of stone-cutting, 1 hour; not yet fixed.
9. Land-measuring, (in summer,) one day.
- 19 hours of lessons; 7 to 13 hours of exercises; and in summer, one day of Land-measuring.

Second Year.—1. *a.* Construction of roads, railroads and hydraulic buildings, 3 hours; Monday, Tuesday and Thursday, 11 to 12.

- b.* Drilling in the same, 1 hour; Wednesday, 9 to 10.
2. Exercises in construction of roads and hydraulic works, 3 afternoons, (6 hours in winter, and 9 in summer;) Monday, Tuesday, and Wednesday, 2 to 4 or 5.

 (Obligatory only on pupils devoting themselves to civil engineering.)

3. Geodesy, 2 hours; Tuesday and Wednesday, 8 to 9. (Obligatory only on pupils devoting themselves to geodesy.)

4. Drawing maps, 3 hours; Thursday, 2 to 4 or 5.
5. Theory of machines, 4 hours; Tuesday and Wednesday, 8 to 10.
6. Setting up of machines, 1 afternoon, (2 hours in winter, 3 in summer;) Friday, 2 to 4.

7. *a.* Integral calculus, 2 hours; Monday and Friday, 10 to 11.
- b.* Analytical geometry, 2 hours; Friday and Saturday, 10 to 11.
- c.* Exercises in integral calculus and analytical geometry, 2 hours; Tuesday and Thursday, 10 to 11.
- d.* Integral calculus (a second course,) 3 hours; Monday and Friday, 10 to 11; and one hour not yet fixed.
- (*b.* and *c.* above, obligatory upon all pupils, and either *a* or *d*, at their option.)

8. *a.* Perspective, and theory of shadows, 2 hours; Monday and Friday, 6 to 7.

- b.* Exercises on the same, 1 hour; not yet fixed.
9. Industrial physics, Industrial natural philosophy, 4 hours; Monday and Thursday, 8 to 10.

10. Modeling in earth and in plaster, 1 afternoon, 3 hours; Saturday, 1 to 5.

11. Technology of building materials, 1 hour; Monday, 4 to 5
- (In winter,) 13 to 21 hours of lessons; 12 to 19 hours of exercises.

Third Year.—1. *a.* Construction of roads; hydraulic building, 3 hours; Monday, Tuesday and Friday, 10 to 11.

- b.* Drilling on the same, 1 hour; Thursday, 10 to 11.
2. Exercises on the same, 3 afternoons; Monday, Tuesday and Wednesday, 2 to 4 or 5.

3. Geodesy, 2 hours; Tuesday and Wednesday, 8 to 9.
4. Drawing maps, 3 hours; Thursday, 2 to 4 or 5.
5. *a.* Geology, 4 hours; Tuesday, Thursday, Friday and Saturday, 9 to 10.
- b.* Drilling on same, 1 hour; not yet fixed.
- Lessons, 9 hours; exercises, all remaining hours.

THIRD DIVISION, OR SCHOOL OF INDUSTRIAL MECHANICS.

- First Year.*—1. Mechanics, 6 hours; Monday, Tuesday, Wednesday, 8 to 10.
 2. Designing machines, 2 afternoons; (4 hours in winter, 6 in summer;) Wednesday and Saturday, 2 to 4 or 5.
 3. a. Elements of differential and integral calculus, 4 hours; Tuesday and Thursday, 8 to 10.
 b. Exercises on same, 2 hours; Friday, 8 to 10.
 4. a. Stone-cutting; and as introductory, theory of contact and intersection of curved surfaces, 3 hours; Tuesday and Friday, 5 to 6; Saturday, 6 to 7.
 b. Drill and exercises on same, 1 hour; not yet fixed.
 5. Construction of models in metal, 1 afternoon, 3 hours; Friday, 1 to 4.
 6. Construction of models in wood, 1 afternoon, 3 hours; Tuesday, 1 to 4.
 Lessons, 13 hours; exercises, 13 to 15 hours.
- Second Year.*—1. Theory of machines, 2 hours; Tuesday and Friday, 8 to 10.
 2. a. Construction of machines, 4 hours; Wednesday and Saturday, 8 to 10.
 b. Setting up of machines, 4 afternoons, (8 hours in winter, 12 in summer;) Tuesday, Wednesday, Thursday and Saturday, 2 to 4 or 5.
 3. a. Integral calculus, 2 hours; Monday and Wednesday, 10 to 11.
 b. Analytic geometry, 2 hours; Friday and Saturday, 10 to 11.
 c. Exercises on both the above, 2 hours; Tuesday and Thursday, 10 to 11.
 d. Integral calculus (a second course,) 3 hours; Monday and Wednesday 10 to 11; 1 hour not yet fixed.
 (b and c., above, obligatory on all pupils; and either a or d, at their option.)
 4. Construction of models in metal, 1 afternoon, 3 hours; Monday, 1 to 4.
 5. Industrial physics, 4 hours; Monday and Thursday, 8 to 10.
 6. Mechanical technology, (in winter,) 4 hours; Monday and Friday, 11 to 12; Saturday, 11 to 12 and 4 to 5.

FOURTH DIVISION, OR SCHOOL OF INDUSTRIAL CHEMISTRY.

- First Year.*—1. Inorganic chemistry, 5 hours; Monday to Friday, 10 to 11.
 2. Exercises on classical analysis in the laboratory, 2 afternoons, 6 hours; Monday and Tuesday, 1 to 4.
 3. a. Zoölogy, first part, 5 hours; Monday to Friday, 5 to 6.
 b. Drill on same, 1 hour; not yet fixed.
 4. General botany, 3 hours; Monday to Friday, 4 to 5.
 5. Mineralogy, 2 to 3 hours; Wednesday and Friday, 3 to 4.
 6. Technical designing, 4 hours; Monday, 8 to 10; Saturday, 10 to 12.
 Lessons, 13 hours; exercises, at least 11 hours.
- Second Year.*—a. *Division of Industrial Chemistry.*—1. Industrial chemistry, 4 hours; Monday to Thursday, 10 to 11.
 2. Manipulations in the laboratory of industrial and pharmaceutical chemistry, 4 afternoons, 12 hours; Monday to Thursday, 1 to 4.
 3. Industrial physics, 4 hours; Monday and Thursday, 8 to 10.
 4. Technical designing, 4 hours; Tuesday and Saturday, 10 to 12.
 5. Chemical technology of building materials, 1 hour; Monday, 4 to 5.
 6. a. Geology, 4 hours; Tuesday, Thursday, Friday and Saturday, 9 to 10.
 b. Drill on same, 1 hour; not yet fixed.
 Lessons 13 hours; exercises 17 hours.
- b. *Division of Pharmaceutical Chemistry.*—1. Industrial chemistry, 4 hours; Monday to Thursday, 10 to 11.
 2. Manipulations in laboratory of industrial and pharmaceutical chemistry, 4 afternoons, 12 hours; Monday to Thursday, 1 to 4.
 3. Technical portion of pharmacy, 2 hours; Tuesday and Thursday, 4 to 5.
 4. Raw materials, pharmaceutically considered, 3 hours.
 5. Pharmaceutical botany, 3 hours; Thursday, Friday and Saturday, 3 to 4.
 6. Industrial physics, 4 hours; Monday and Thursday, 8 to 10.
 Lessons, 16 hours; exercises, 12 hours.

FIFTH DIVISION, OR SCHOOL OF FORESTRY.

First Year.—1. Encyclopedia of forestry, 3 hours; Monday, Wednesday and Thursday, 8 to 9.

2. Valuation and estimates of roads, 2 hours; Monday and Wednesday, 9 to 10.

3. Excursions, exercises on taxation, drill and conversation, 1 day; Saturday.

4. a. Zoölogy, first part, 5 hours; Monday to Friday, 5 to 6.

b. Drill and questions on above, 1 hour; not yet fixed.

5. General botany, 3 hours; Monday to Friday, 4 to 5.

6. Mineralogy, 2 hours; Wednesday and Friday, 3 to 4.

7. Topography, 3 hours; Monday, Tuesday and Thursday, 10 to 11.

8. Design of plans, 2 to 3 hours; Monday, 2 to 4 or 5.

9. Geology, with drill on same, 5 hours; Tuesday, Thursday, Friday and Saturday; and 1 hour not yet fixed.

Lessons, 24 hours; exercises, 4 to 5 hours, and 1 day.

Second Year.—1. Forest administration and police, 3 hours; Monday, Wednesday, Friday, 11 to 12.

2. Preservation of forests, 2 hours; Tuesday and Thursday, 11 to 12.

3. Statistics and literature of forestry, 1 hour; Friday, 10 to 11.

4. Management of forests, 4 hours; Tuesday and Friday, 8 to 10.

5. Introduction to management of forestry business, 1 hour; Monday, 6 to 7.

6. Excursions, drill, and conversation, 1 day; Saturday.

7. Construction of bridges and roads, 2 hours; Wednesday, 8 to 9; and 1 hour not yet fixed.

8. Industrial physics, 4 hours; Monday and Thursday, 8 to 10.

Lessons, 11 hours; exercises, 1 day and 1 hour.

SIXTH DIVISION; OF PHILOSOPHICAL AND POLITICAL SCIENCE.

a. *Natural Sciences.*—1. Inorganic chemistry, 3 hours; Monday to Friday, 10 to 11.

2. Exercises on chemical analysis in laboratory, 3 hours; Tuesday, 1 to 4.

3. Exercises, for the most advanced students, every day except Saturday.

4. Chemical technology of building materials, 1 hour; Monday, 4 to 5.

5. Experimental physics, 6 hours; every day, 11 to 12.

6. Drill on the preceding, 2 hours; not yet fixed.

7. Mathematical physics; introduction, and theory of elasticity, 4 hours; Tuesday, Wednesday, Friday and Saturday, 8 to 9.

8. Zoölogy, first part, 3 hours; Monday to Friday, 5 to 6.

9. Drill and questions on same, 1 hour; not yet fixed.

10. General botany, 5 hours; Monday to Friday, 4 to 5.

11. Use of microscope, daily; forenoon.

12. Antediluvian plants, 3 hours; Monday, Tuesday and Friday, 2 to 3.

13. Fossil insects, 2 hours; Tuesday and Wednesday 5 to 6.

14. Natural history of mushrooms, with special reference to maladies of plants and animals, 2 hours.

15. Drill on general botany, with microscopic demonstration, 2 hours.

16. Drill on general botany, with herbal, 1 hour.

17. Geology, 4 hours; Tuesday, Thursday, Friday and Saturday, 9 to 10.

18. Drill on same; 1 hour, not yet fixed.

19. Swiss materials for building, 2 hours; Tuesday and Thursday, 4 to 5.

20. History, construction and coloring of geological charts and sections.

21. Mineralogy, 2 to 3 hours; Wednesday and Friday, 3 to 4.

(Other lessons on mineralogy will be hereafter announced.)

b. *Mathematical Sciences.*—22. Integral calculus, continued from last term, for second year of second and third divisions, 2 hours; Monday and Wednesday, 10 to 11.

23. Analytical geometry, continued from last term, for second year of second and third divisions, 2 hours; Friday and Saturday, 10 to 11.

24. Exercises for all the students of first and second year of second and third divisions, 2 hours; Tuesday and Thursday, 10 to 11.

25. Algebraic analysis, 2 hours; Monday and Thursday, 11 to 12.
 26. Elements of differential and integral calculus, 4 hours; Tuesday and Thursday, 8 to 10.
 27. Exercises on differential and integral calculus, 2 hours; Friday, 8 to 10.
 28. Intersection and contact of curved surfaces, and stone-cutting, 4 hours; Tuesday and Friday, 5 to 6; Saturday, 6 to 7; and 1 hour not yet fixed.
 29. Perspective and theory of shadows, 3 hours; Monday and Wednesday, 6 to 7; and 1 hour not yet fixed.
 30. Elements of astronomy, as introduction to geodesy, 3 hours; Wednesday, Thursday and Saturday, 5 to 6.
 31. Mathematics, pure and applied, after a manual to appear soon, 4 hours; and a drill of 1 hour.
 32. Practical course of differential and integral calculus, 3 hours.
 33. Descriptive geometry, first part, 2 to 3 hours.
 34. Method of teaching mathematics for candidates for employment as teachers, 2 hours.
 35. Geometrical analysis of surfaces of the second degree, 2 hours.
 36. Synthetic geometry, after Steiner, 2 hours.
 37. Theoretical astronomy, 2 hours.
 38. Integral calculus, 3 hours; Monday and Wednesday, 10 to 11; and 1 hour not yet fixed.
 39. Elementary mathematics, including the branches detailed in the programme for 1856-7, (in French,) 6 hours.
 40. Political arithmetic, (interest, rent, savings' banks, banks,) &c., 2 hours; (in German or French.)
 41. Mechanics, 6 hours; Monday, Wednesday and Saturday, 8 to 10.
- c. *Literary, Moral and Political Science.*—42. "Faust" of Goethe, 2 hours; Wednesday and Friday, 4 to 5.
43. "Parcival" of Wolfram von Escheubach and "Tristan" of Gottfried von Strassburg, 2 to 3 hours; Tuesday, Thursday and Saturday, 4 to 5.
(The same instructor, (Prof. Vischer,) will give a course of instruction at the university, in æsthetics, part first, 4 to 5 hours.)
 44. French literature, 3 hours; Tuesday, Thursday and Saturday, 4 to 5.
 45. Italian literature, 3 hours; Tuesday, Thursday, Friday, 6 to 7.
 46. Italian composition, 1 hour; Thursday, 5 to 6.
 47. History of English literature from end of last century to present time, 2 hours; Tuesday and Thursday, 6 to 7.
 48. Shakspeare's "Timon of Athens," and "Love's Labors Lost," translated and explained, 2 hours; Monday and Wednesday, 6 to 7.
 49. Exercises in speaking and writing English, 2 hours; Monday, 5 to 6; and Friday, 6 to 7.
 50. General modern history, with special reference to intellectual developments, 3 hours; Monday to Friday.
 51. Sources of Roman History, 2 hours; Saturday, 9 to 11.
 52. Art of building in the middle ages and the *Renaissance*; and as introductory, a general view of the art of building among the ancients, 4 hours; Tuesday and Friday, 5 to 7.
 53. General views of the history of the *Renaissance*, 4 hours; Monday, Wednesday, Thursday and Saturday, 5 to 6.
 54. History of painting and sculpture since the fifteenth century, 4 hours; Monday, Tuesday and Thursday, 11 to 12; Saturday, 6 to 7.
 55. Archæology of Christian Art, 2 hours.
 56. Classic and German mythology, 2 hours.
 57. Greek anthology, 2 hours.
 58. Political economy, 3 hours; Monday, Wednesday and Friday, 6 to 7.
 59. International law, 2 hours; Tuesday and Thursday, 6 to 7.
 60. Commercial law, 3 hours; Monday, Wednesday and Friday, 4 to 5.
 61. Forestry laws, 1 hour; Tuesday, 3 to 4.
- d. *Fine Arts.*—62. Landscape drawing, 4 hours; Thursday and Friday, 2 to 4.
63. Drawing the figure, after copies and models; Monday, Tuesday and Thursday, 2 to 4.

64. Modeling in earth and plaster, for students in architecture and engineering, 2 afternoons; Monday and Saturday, 1 to 4.

65. Designing ornaments for buildings, furniture, and other productions of arts and trades, 4 hours; Monday and Tuesday, 10 to 12.

Instruction in German will be given, if thought necessary.

APPARATUS, ETC., FOR INSTRUCTION.

a. *Collections.*—During the year 1855-6 collections have been commenced, and carried to a point nearly as follows:—

For drawing the figure.—Parts of the body, and entire figures. Simple outlines, and shaded designs after the different methods of Julien and Volpata. Models by Albin and Mart. Fischer, for instruction in plastic anatomy. A prepared human skeleton. Busts and detached portions of the body in plaster, mostly after the antique.

For landscape drawing.—Lithographs of Calame; studies by the professor.

For architectural drawing.—Including constructions in wood and stone and architectural decoration, by different masters. (See below, under *Library*.)

Models of construction.—Collection of pieces of wood; models of roofs, mostly after Moller; various arches for doorways; all from the establishment of Schroeder at Darmstadt. This collection will be completed as soon as possible, from the rooms for working in wood and for making models.

Plaster models of architectural ornaments.—Capitals and bases of antique columns, and other portions of monuments of antiquity, mostly from the archaeological collections of Paris.

Instruments for land surveying.—Large instruments for measuring angles; including, a repeating theodolite and another smaller theodolite, by Brunner of Paris; five leveling instruments, from Ertel of Munich, Starke of Vienna, Kinzelbach of Stuttgart, and Goldschmidt of Zürich; four surveyor's tables; and other instruments, by Goldschmidt of Zürich and other Swiss makers.

For drawing plans.—Designs, partly by Prof. Bardin, of the Polytechnic School at Paris, but principally by Prof. Wild.

Astronomy.—Various small instruments which have been used during the summer for the practical exercises carried on in the small observatory at Zürich, which has been temporarily put in order for the purpose.

Machines.—Models for the transformation of motion, from Prof. Walter of Augsburg. (Engrenages,) by Schroeder of Darmstadt. Models of turbine wheels on a large scale, and section models of steam-engines, are being constructed in the work-rooms of the school.

There is a Weissbach's hydraulic apparatus, with its accessories, for instruction in mechanics.

Library.—During the year which is all that has elapsed since the foundation of the library, there have been collected about 2,000 volumes, most of them upon the various mathematical and applied sciences taught in the school, and of which a small number appertain specially to the sixth division. One set of works with copperplates, on the art of building, is of great value.

In the reading-room are to be found thirty journals, mostly technical and mathematical, but some upon other sciences.

The library was opened January 27, 1856, since which time have been given 610 discharges of receipts for books taken home. Besides most of the professors, 62 pupils of the polytechnic school have made use of the library.

There are at Zürich collections in natural history, an archaeological collection, a library for natural history, and another for the sciences; to all of which pupils can have access.

b. *Scientific and Technical Departments.*—*Chemical laboratory for analysis.*—This is arranged for practical men, and well provided with all the necessary apparatus. Two afternoons are employed in the obligatory practice of the regular pupils, to whom the laboratory is always open at other times. During the first term, 11 regular scholars and 14 attendants on lectures made use of it, and during the last term, 11 of the former and 10 of the latter.

Laboratory of chemistry for technical and pharmaceutical operations.—This, after some small changes shortly to be made, is calculated for sixteen practicing scholars. Some large apparatuses necessary in a technical laboratory have not yet been erected, on account of want of room; but there is a sufficient supply of other apparatus. The collection of articles for use in chemical instruction is already begun. This laboratory has been attended during the first term by two regular pupils and three attendants on lectures, and during the second, by two of the former and five of the latter. The operations performed by the regular pupils are adapted to their future employment.

Cabinet of natural philosophy.—The collection of instruments of natural philosophy has been hitherto provided with instruments chiefly coming from the manufacturers of Paris and Berlin. The Regnault's steam apparatus is by Galaz, the thermometrical apparatus, by Fostée, the optical apparatus by Duboscq, of Paris, and all the electrical apparatus from Berlin. Various instruments have been procured, also, from other German or Parisian manufacturers. During the lessons, use has also been made of the apparatus belonging to the canton of Zürich, which are deposited in the same place.

Convenient accommodations are yet wanting for exact physical experiments and large operations.

Workshop for making models in metals.—During the first term, fifteen regular pupils and 1 attendant on lectures have been employed here, and the same number during the second. It contains ten vices, with the instruments belonging to them; but those which are least used are fewest in number. One vice, with a more complete set of tools, is appropriated to the adjoint professor in charge, and each of the others is used during one term by a set of pupils who use it alternately. Each vice, and the tools belonging to it, are designated by a certain number. The most important large instruments in this workshop are, a lathe for turning metals, arranged also for cutting screws; a hand machine for planing metals; a boring machine, shears, &c.; a forge with a small ventilating blast on the American plan, to work by hand, with anvils, tongs, and the whole apparatus of a complete small forge.

Workshop for models in wood.—This was used during the first term by seven regular pupils and three attendants of lectures, and during the second by five of the former and two of the latter. It contains five carpenter's benches with their fittings, one of which is set apart for the adjunct professor, and the others are used by the pupils. There is also a turning-lathe for wood with the tools. The vices and benches are numbered, and the tools belonging to each has the same.

As almost all the pupils who have been at work here during the current year has had no previous practice, the first months were occupied in teaching them how to handle the tools. In the workshop for metals they filed cubes, and in that for wood, learned to use the principal tools. Afterwards they were set to construct models of machinery; and in the former of the shops the pupils have been made to do as much as was possible, the instructor only putting on the finishing touch.

The models completed are as follows:—

1. Section model of locomotive cut-off, with Stephenson's (coulisse.)
2. Section model of locomotive cut-off, on Gooch's plan.
3. Diagram showing the excellences of the different locomotive cut-offs.

There is, not yet completed, a locomotive cut-off on the plan of Heusinger of Waldegg.

In the workroom for wood, except a model of a roof by a pupil who had practiced before, no large model has been made; the pupils have been altogether employed in making presses for their tools. Both pupils and teacher have had to employ much time in finishing off their workroom, and preparing it for use, and to construct (especially the teacher) a large supply of simple tools: and the same is the case in the workroom for metals.

During the coming year, in which the number of pupils will constantly increase, the directors will endeavor to have constructed various small machines for the collections, and especially models which may be used in the course of instruction; and will endeavor to make all the scholars assist in this design, each according to his capacity.

The instructors in charge of the work will use all their time, outside of the hours of instruction, in the workshop and in finishing difficult models.

Workshop for modeling in earth and plaster.—There have been prepared plaster models of stonework, to a given scale, according to the theoretical course in stone-cutting, and also architectural ornaments and parts of the body modeled in earth and afterwards molded in plaster. The workshop, besides the pupils regularly employed in it, has been used during the first term by nine others, and during the second by three. Most of these others were obliged during the latter term to return to their own practical vocations. The professor (the sculptor, M. Reiser,) does all his own work, whether in earth, plaster or marble, in the shop before the pupils, so that they are enabled to learn the technical execution of such work, and at the same time form their taste.

All these workshops have been open to the pupils during the whole day, excepting hours of instruction, and the masters have been constantly present.

METHOD PURSUED IN INSTRUCTION.

The instruction in the studies obligatory upon each division has consisted partly of drills (*répétitions*), exercises and practical demonstrations in the course of technical and scientific excursions.

Regular drilling exercises have been arranged, especially in the departments relative to mathematical and natural science. During most of these, as those in pure mathematics, descriptive geometry, mechanics, &c., numerous problems have been proposed in the course of the year, whose solution has in part been required of the pupils within a given time, in part left to their option, or examined by the professor and discussed with the pupils.

Among practical exercises, intended almost exclusively to stimulate the individual faculties of the pupils, are; those in design and construction, of the pupils of the schools of architecture, civil engineering and industrial mechanism; those in land-measuring, of the first year of the school of engineers, in which a whole day per week is employed; the manipulations in the analytical and technical laboratories; and the work in the shops. Pains have been taken to induce the pupils to spend most of their time not occupied in lessons, in the drawing-rooms, laboratories and workshops, and to consider them their own habitual places of labor.

But great hindrances to this plan have arisen from the great distance apart of the various departments of the school, which causes the loss of much time in the frequent comings and goings of the pupils, and from the fact that the timetable for study has not been arranged in a manner entirely satisfactory.

Excursions have from the first been regularly made with the pupils in the school of forestry, in the forests near Zürich. Prof. Marchand also took his pupils to the meeting of the Society of Swiss Foresters, which was held this year at St. Gall, that they might hear the discussions. Prof. Heer, has also regularly made short excursions, besides one long one, for the sake of instruction in botany. The pupils of the second year in the school of engineering have visited, under the direction of Prof. Calmann, besides the bridges near Zürich, the iron bridge over the Sitter near St. Gall, of which last they took drawings and measures in sufficient detail to enable them to execute, in the drawing-rooms, complete designs of that interesting work. The thanks of the institution are here offered to the engineers employed there, for their kind attentions to the professor and to his pupils.

A long excursion with a view to chemical and mechanical studies was undertaken by Profs. Bolley and Reuleaux, with the pupils of their divisions. They visited various places near the Rhine and above Basle, and returned by way of Basle and Aaran. In the course of this trip the pupils were enabled to examine a furnace and set of trip-hammers, a tin-work, a rolling-mill, a salt-work, a wood-gaswork, which was especially interesting to the pupils, as one had also been recently constructed at Zürich. They also examined a cement-kiln, a manufactory of chemicals, one of printed goods, silk spinneries, &c. The proprietors of these establishments, with a politeness which deserves our acknowledgements, allowed us to take many drawings in them.

A measure similar to that adopted by several other industrial institutions, is the establishment of monthly competitions at prescribed tasks. The regulations for these are contained in the annual programme.

PROGRAMME FOR 1867-68—SIXTY-TWO PROFESSORS.

SUBJECTS OF INSTRUCTION, CLASSED BY DIVISIONS.

FIRST DIVISION, OR SCHOOL OF ARCHITECTURE. (*Course three years.*)

First Year.—Differential and integral calculus; Descriptive geometry; Construction of buildings, (2 courses;) Architectural design; detailed drawings of plans of buildings; Designing the figure; Ornamental drawing; Landscape drawing; Theory of contacts and intersections of curved surfaces, stone cutting; History of ancient art; Modeling in clay and plaster; Experimental chemistry.

Second Year.—Art of building (2 courses,) embracing art of building civil edifices in middle ages and in modern times; Practical exercises in building; Theory of shadows and perspective; Mechanics, theory of machines; Construction of bridges and roads; Drawing of figures; Construction of arches and vaults.

Third Year.—Practical exercises in building; Ornamental drawing; Technical geology; Law concerning buildings; Chemical technology; Lithology, with practical exercises.

SECOND DIVISION, OR SCHOOL OF CIVIL ENGINEERING.

First Year.—Differential and integral calculus (2 courses;) Descriptive geometry; Art of building and drawing; Drawing of plans; Experimental physics; Experimental chemistry.

Second Year.—Theory of differential equations; Differential and integral calculus; Industrial mechanics; Geometry of position; Theory of shadows and perspective; Technical geology; Topography, drawing of charts; Description of machines and drawing of plans.

Third Year.—Theory of machines; Astronomy; Geodesy; Construction of bridges and rail-roads, with designs; Administrative law; Drawing of maps; Construction of iron frame-works; Technology of building material; Astronomy, with exercises in the observatory; Practical and theoretical surveying; Lithology.

THIRD DIVISION, OR SCHOOL OF INDUSTRIAL MECHANICS.

First Year.—Differential and integral calculus (2 courses;) Descriptive geometry, with exercises; Analytical geometry of surfaces, with exercises; Drawing and designing of machines; Experimental physics applied to mechanics; Experimental chemistry.

Second Year.—Theory of differential equations; Differential and integral calculus; Industrial mechanics; Art of constructing machines (2 courses;) Selected portions of the same art; Technology of mechanics; Science of motion.

Third Year.—Theory of machines; Construction of models in wood; Construction of models in metal; Regulators; Metallurgy; Technology of building material.

FOURTH DIVISION, OR SCHOOL OF INDUSTRIAL CHEMISTRY.

First Year.—Inorganic chemistry; Organic chemistry; Selected portions of organic chemistry; Experimental physics; Manufacture of chemicals; Glass and pottery; Description of machines; Mineralogy; Elements of general botany; Geology; Industrial drawing; Chemical analysis in the laboratory; Zoölogy; Chemical experimentation applied to industrial arts.

Second Year.—Bleaching, dyeing and printing of tissues; Practical manipulations in the laboratory; Technology of machines; Crystallography applied; Practical geology; Industrial chemistry; Industrial drawing; Analysis in the laboratory.

Third Year.—Organic experimental chemistry; Analytical chemistry; Metallurgy; Chemical technology of building material; Special botany; Classification of minerals, with exercises; Heating and lighting of buildings; Food and nutrition; Pharmaceutical chemistry for druggists and apothecaries; Pharmaceutical botany; Pharmaceutical chemistry; Technical portion of pharmacy; Raw materials pharmaceutically considered; Manipulation in the laboratory of pharmaceutical chemistry; Toxicology.

FIFTH DIVISION, OR SCHOOL OF FORESTRY. (2 years' course.)

First Year.—Mathematics in reference to practical uses in forest culture; Botany; Topography; Drawing of plans; Science of managing forests; Excursions and exercises in valuation; Experimental chemistry; Law concerning forests; Mineralogy; Geology; Zoology.

Second Year.—Exploration of forests; Preservation and utilization of forests; Management of forests by the state; Statistics and literature of forestry; Climates and soils applied to forestry; Technical geology; Construction of bridges and roads; Administrative law and police; Botany and entomology applied to forestry; Agricultural chemistry; Lithology; Practical surveying; Industrial physics.

SIXTH DIVISION, OR NORMAL SCHOOL OF MATHEMATICS AND NATURAL SCIENCE.

Section a. Mathematics.

First Year.—Differential and integral calculus; Analytical and plain geometry, with practical exercises; Introduction to analytical geometry; Analytical geometry, with practical exercises; Experimental physics applied to arts.

Second and Third Year.—Theory of differential equations; Theory of functions; Geometry of position, with practical exercises; Astronomy; Selected portions of higher astronomy, with exercises; Technical mechanics; Theory of life insurances; Analytical mechanics; Mathematical theory of gravitation, of electricity and magnetism; Physical geography; Mensuration of bodies.

Section b, Natural Sciences.

First Year.—Practical and analytical chemistry; Selected portions of inorganic experimental chemistry; Mineralogy; General botany; Zoology.

Second Year.—Praxis in industrial chemistry; Crystallography applied; Microscopical exercises; Mensuration of bodies; General geology; Antediluvian plants and fossil insects.

SEVENTH DIVISION, OR SCHOOL OF LITERATURE, MORAL SCIENCES AND POLITICAL ECONOMY

a. Natural Sciences.—Experimental physics; Microscopical exercises; General botany; Physical geography; Geology; Zoology; Pharmaceutical botany; Fossil plants; Fossil insects; Mineralogy; Compounds of cyanogen; Polyatomic alcohols; Essential oils and aromatic compounds in general; Palaeontology; Geology of sedimentary formations; Pharmaceutical chemistry; Toxicology; Selected portions of experimental chemistry; Fossils characteristic of the geological formations of Switzerland; Physical chemistry; Stoechiometry; Analytical chemistry, qualitative and quantitative; History of chemistry; Repetitions of organic chemistry.

b. Mathematical Sciences.—Elementary astronomy; Theory of life-insurances; Theory of surfaces of the second degree; Elements of differential and integral calculus; Exercises in differential calculus; Exercises in industrial mechanics; Analytical mechanics; Mathematical theory of gravitation; Light, electricity and galvanism; Determinants; Higher mechanics; Political arithmetic, (interest, rent, savings banks.)

c. Languages and Literature.—History of ancient German literature to the end of the 17th century; Exercises in oratory; History of literature; Molière and his time; Lecture on and explanation of the *Cid* of Corneille; Lecture on and explanation of chosen pieces from the *Lettres Persanes* de Montesquieu;

Exercises in the French language; History of English literature; English novels; Shakspeare's Julius Cæsar; Exercises in the English language; *La commedia dell' arte in Italia e fuori d'Italia*; *La poesia ispiratrice di Raffaello e del Correggio*; Exercises in the Italian language.

d. History, Moral Sciences and Political Economy.—History of the time of Frederick the Great and the French revolution; Sixteen characters of universal history—Pericles, Demosthenes, Alexander the Great, Hannibal, Cato junior, Tiberius, Attila, Mahommed, Charlemagne, Gregory the Seventh, Johanna of Arc, Richelieu, Cromwell, Peter the Great, Washington, Cavour; General theory of political economy; Commerce of the world from the foundation of the United States of America up to the present time; Exposition and discussions on questions of political economy; History of ancient art; History of modern painting since the introduction of oil-colors; Commercial law; Political economy; Critical studies of the doctrines of socialists and of reformists; Elementary course of international law; Laws of the Swiss confederation; History of Switzerland under the Helvetic republic; The British empire in the five divisions of the globe; History of geography (2 courses;) Introduction to geography, industry and commerce; Explanation of the sculptures in the museum of archæology.

e. Fine Arts.—Drawing of ornaments and decorations in the interior of buildings; Landscape drawing; Drawing of heads and figures from models; Modeling; Theory of harmony.

EIGHTH DIVISION—PREPARATORY COURSE OF MATHEMATICS TAUGHT BOTH IN FRENCH AND GERMAN; MODERN LANGUAGES.

Algebra; Geometry of space and plane trigonometry; Elements of descriptive geometry; Practical geometry; Experimental physics; Experimental chemistry; Instruction in German; Instruction in French.

NATIONAL DEPARTMENT OF EDUCATION.

The undersigned desires to obtain, as early as practicable, accurate but condensed information of the designation, history, and present condition of every Institution and Agency of Education in the United States, and of the name, residence, and special work of every person in the administration, instruction, and management of the same. Any response to this Circular in reference to any Institution, Agency, or subject included in the following Schedule, addressed to the *Department of Education, Washington, D. C.*, and indorsed "*official*," is entitled, by direction of the Postmaster General, to be conveyed by mail *free* of postage, and will be thankfully received by

HENRY BARNARD,
Commissioner of Education, Washington, D. C.

SCHEDULE OF INFORMATION SOUGHT RESPECTING SYSTEMS, INSTITUTIONS, AND AGENCIES OF EDUCATION.

A. General Condition, (of District, Village, City, County, State.)

Territorial Extent, Municipal Organization, Population, Valuation, Receipts, and Expenditures for all public purposes.

B. System of Public Instruction.

C. Incorporated Institutions, and other Schools and Agencies of Education.

I. ELEMENTARY OR PRIMARY EDUCATION.

(Public, Private, and Denominational; and for boys or girls.)

II. ACADEMIC OR SECONDARY EDUCATION.

(Institutions mainly devoted to studies not taught in the Elementary Schools, and to preparation for College or Special Schools.)

III. COLLEGIATE OR SUPERIOR EDUCATION.

(Institutions entitled by law to grant the degree of Bachelor of Arts or Science.)

IV. PROFESSIONAL, SPECIAL, OR CLASS EDUCATION.

(Institutions having special studies and training, such as—1. Theology. 2. Law. 3. Medicine. 4. Teaching. 5. Agriculture. 6. Architecture, (Design and Construction.) 7. Technology—Polytechnic. 8. Engineering, (Civil or Mechanical.) 9. War, (on land or sea.) 10. Business or Trade. 11. Navigation. 12. Mining and Metallurgy. 13. Drawing and Painting. 14. Music. 15. Deaf-mutes. 16. Blind. 17. Idiotic. 18. Juvenile offenders. 19. Orphan. 20. Girls. 21. Colored or Freedmen. 22. Manual or Industrial. 23. *Not specified above*—such as Chemistry and its applications—Modern Languages—Natural History and Geology—Steam and its applications,—Pharmacy—Veterinary Surgery, &c.)

V. SUPPLEMENTARY EDUCATION.

1. Sunday and Mission Schools. 2. Apprentice Schools. 3. Evening Schools. 4. Courses of Lectures. 5. Lyceums for Debates. 6. Reading Rooms—Periodicals. 7. Libraries of Reference or Circulation. 8. Gymnasiums, Boat and Ball Clubs, and other Athletic Exercises. 9. Public Gardens, Parks and Concerts. 10. *Not specified above*.

VI. SOCIETIES, INSTITUTES, MUSEUMS, CABINETS, AND GALLERIES FOR THE ADVANCEMENT OF EDUCATION, SCIENCE, LITERATURE, AND THE ARTS.

VII. EDUCATIONAL AND OTHER PERIODICALS.

VIII. SCHOOL FUNDS AND EDUCATIONAL BENEFACTIONS.

IX. LEGISLATION (STATE OR MUNICIPAL) RESPECTING EDUCATION.

X. SCHOOL ARCHITECTURE.

XI. PENAL AND CHARITABLE INSTITUTIONS.

XII. CHURCHES AND OTHER AGENCIES OF RELIGIOUS INSTRUCTION.

XIII. REPORTS AND OTHER PUBLICATIONS ON SCHOOLS AND EDUCATION.

XIV. MEMOIRS OF TEACHERS, AND PROMOTERS OF EDUCATION.

XV. EXAMINATIONS (COMPETITIVE, OR OTHERWISE) FOR ADMISSION TO NATIONAL OR STATE SCHOOLS, OR TO PUBLIC SERVICE OF ANY KIND.

VII. THE PHILOSOPHY AND METHOD OF TEACHING

PURSUED AT THE WESTFIELD STATE NORMAL SCHOOL.

BY J. W. DICKINSON, A. M., PRINCIPAL.

1. THE PHILOSOPHY OF TEACHING.

If the mind is led to act in accordance with the laws of its nature, it will acquire the inclination and the ability to obey these laws. That state of the mind in which it has the inclination and the ability to obey the laws of its nature, is called Education; and the mind possessing this state, is said to be educated.

This definition of Education makes it a state of the mind and not a process. There is but one process by which the mind can be changed from one state to another, and that process is found in the mind's own activity.

By mental activity, knowledge is acquired, and the knowledge in turn excites activity, but it is activity only that produces a change in the powers that act.

As knowledge is both the product and the occasion of mental activity, knowledge seems to combine with mental activity in producing the state called Education.

That which produces a thing is the cause of that thing; then the cause of education is knowledge and mental activity. The cause of education is also called Instruction.

The term Instruction is sometimes used to signify knowledge, and sometimes to signify the process by which the teacher leads his pupils to acquire knowledge.

The word Instruction means to build within, and may well be limited in its application to mental activity and knowledge, which we have shown build up to perfection the mind itself.

It is the duty of the teacher to present in a right manner to the mind, objects and subjects which he desires to be the occasion of mental activity and knowledge.

The process of presenting occasions is Teaching.

The relations that Education, Instruction; and Teaching, hold to one another, are these: Instruction is the cause of Education, and Teaching is the occasion of Instruction.

Teaching must have for its object one of two ends, Knowledge or Education.

Knowledge as an end is valueless; then, the end towards which all intelligent teaching directs its attention, is Education.

If Education is the end the teacher should lead his pupil to attain, and if mental activity is the primary cause of Education, the teacher must provide right occasions for a complete and perfect mental activity. The ability to do this implies a knowledge of the ways in which the mind acts.

The modes, or ways of mental action, are three; thinking, feeling and choosing.

The mind thinking is called the Intellect: the mind feeling is called the Sensibilities; the mind choosing is called the Will.

The activity of the sensibilities is the result of thinking; the activity of the will is the result of feeling,—therefore, the teacher turns his attention primarily to the activity of the Intellect.

Every Intellectual act is an act of comparison.

The Intellect compares for perceptions, for general notions, for judgments, and for reasoning.

The teacher must present to the minds of the pupils, as occasions for these different acts of comparison, subjects and objects, named in proper order, for a *course of study*.

The course of study is divided into two courses: the one being an Elementary, the other a Scientific course.

In the Elementary course, the mind is excited to activity in acquiring a knowledge of facts.

This knowledge of facts is to be used as the occasion of Scientific knowledge.

A complete and perfect course of study, will name objects and subjects sufficient in number, and of the right kind, to guide the teacher in presenting occasions to the minds of his pupils, for making all kinds of comparisons; for comparing all kinds of objects; for comparing all kinds of relations, and for making the comparisons in the order, and in the manner required by the mind, as its powers are developed.

These are the principles which constitute the philosophy of teaching.

2. MODE OF TEACHING.

There are two ways of teaching. One way consists in presenting objects and subjects first as wholes, for general knowledge, then the parts and their relations for particular knowledge. The other way consists in first presenting parts of things, and the relations of the parts, for particular knowledge, then the whole made up of these parts and of their relations, for general knowledge.

These two ways of teaching are called Modes, or Methods. The first method is called the Analytic, the second the Synthetic method.

A synthetic method of study is impossible; as a method of teaching it is faulty for two reasons:

1st. The application of the method requires the teacher to present as occasions for mental activity and knowledge, parts of wholes, not as parts, but as independent individual things, that are not seen to hold any rela-

tion to the wholes of which they are parts, until the relation has been established by the teacher.

2d. The method requires the teacher to do the work that belongs to the student.

The application of the Analytic method requires the teacher to assign lessons for study, by the use of topics made out according to the following rules:

1st. The objects and subjects to be presented for study, should be of such a kind as are adapted to call into exercise the powers of the mind in accordance with the time and order of the development of these powers.

2d. The first topics assigned should be those that lead the pupil to study for Elementary knowledge.

3d. The first topic in any study should require the pupil to search for a general knowledge of the object or subject of study.

4th. The minor topics should present the parts of objects in a natural order, and of subjects in a logical order, and require the pupil to study for particular knowledge.

5th. The topics should lead the pupil to exhaust the subject.

Language is not to be considered the primary source of knowledge, but the mind is to be made conscious of having the ideas and thoughts to be expressed by the language used, before the language is employed.

This is done by actually bringing into the presence of the mind the object of study.

It is the duty of the teacher to excite the minds of his pupils to such mental activity as will lead to the state called Education, by bringing into their presence, in a right manner, the thing to be studied, and by guiding them to a knowledge of the facts and truths he would have them know.

All lessons are to be taught orally by the teacher, in such a manner that he will do nothing except furnish an occasion for knowledge.

The pupil should acquire the knowledge by his own mental activity.

The lesson thus taught will furnish for the pupil topics properly arranged for study, and a knowledge of the topics sufficient to enable him to continue to study them intelligently and profitably.

Text-books may be put into the hands of the pupils to be used as reference books. As text-books are sometimes used, they take away the possibility of independent mental activity on the part of both teacher and pupil.

The pupil having prepared his lesson, is to recite before the class upon the topic or topics, assigned at the time by the teacher.

He is to develop, without questions by the teacher, the topics assigned him, illustrating carefully the ideas and thoughts he expresses in words, before the expressions are made, observing to follow the same Analytic method in recitation that was observed by the teacher in assigning the topics, and by himself in studying them.

Both the teacher and the class are to observe carefully the pupil reciting, with reference to his knowledge, and his mode of teaching or reciting.

After the pupil has completed his recitation, the teacher and pupils may make criticisms, for the purpose of correcting mistakes, and for calling attention to new truth.

The pupil should be permitted, and even required, to use his active powers in obtaining knowledge, as well as his passive powers in receiving it.

The teacher should be constantly aware of the nature of his work, and of the end to be secured, and of the relation the means he employs holds to that end.

Successful teaching implies the existence of a course of study that is adapted to the wants of the mind as its powers are developed. It requires the employment of the right method in applying this course, and the presence of a teacher who understands the philosophy of his work.

The teacher must be supplied with all external means necessary for his teaching, and with the cordial sympathy of all in authority over him, and then he can so apply his philosophical method as to obtain a better and higher result than the schools have yet known.



VIII. COEDUCATION OF THE SEXES.

AN ADDRESS BEFORE A MEETING OF COLLEGE PRESIDENTS AT SPRINGFIELD, ILL.

BY REV. JAMES H. FAIRCHILD, D. D., OF OBERLIN COLLEGE, JULY 10TH, 1887.

MR. PRESIDENT, AND GENTLEMEN OF THE ASSOCIATION :

THE invitation extended to me by your Executive Committee, to share in your deliberations upon this question, was based upon the fact of my connection with a school in which the system of education under discussion has been in operation for many years ; and it was intended that I should present the subject in the light of that experience. It seems more fitting to confine myself to arrangements and results at Oberlin, stated descriptively and historically, than to attempt any general discussion of the subject—a work more appropriate to the members of the Association.

That I may speak without restraint upon these matters, it is proper for me to say that I entered the College as a boy at its opening, and served seven years as a pupil before entering upon the responsibilities of a member of its board of instruction. Thus I appear before you as one of the children of the school, and not one of the fathers, and shall not seem to speak of the work of my own hands, as I claim no personal responsibility for the wisdom or folly of the arrangement.

Oberlin College is now in the thirty-fourth year of its life, and from the beginning has embraced among its pupils both young men and young women. The first year it was a high school, with something over a hundred pupils, more than one-third of whom were ladies: not a local school, for the enterprise started in the woods, and one-half of the students at least were from New England and New York. The second year the numbers increased to nearly 300, with theological and college classes in full operation, the ladies being about one-fourth of the whole. In two or three years the numbers reached 500, and maintained that annual average until 1852, when the number was suddenly doubled, and has averaged more than a thousand yearly for the last fifteen years. The proportion of young ladies has not for many years fallen below one-third, nor risen above one-half, except during the war, when the ladies predominated in the ratio of five to four. The last Annual Catalogue gives 655

gentlemen and 490 ladies, and this is about the normal proportion. These are young men and women of such ages as the advanced schools of the land generally present.

The *town* began with the school and has kept pace with it, containing at present from 3,000 to 4,000 inhabitants. At first, almost all the accommodations for the students in room and board were furnished by the College. The dormitory system was adopted for both young men and young women, separate halls or buildings being assigned to each—the ladies' hall being also a boarding-hall, in which seats at table were provided for young men. As the numbers increased and the dwellings in the village were improved and multiplied, the students were to a greater extent provided for among the families, until at present far the greater number are thus furnished with homes. Our present ladies' hall affords rooms for about 100 young ladies, and sittings at table for about 220 boarders. Large boarding-houses are not found; but a majority of families that have room receive a few students. The young ladies find their homes under this arrangement as well as the young men. Some families receive young ladies only; but families are permitted, with suitable arrangements, to receive both classes. The entire female department is under the immediate charge of a lady Principal, and her assistant; and these are occupied, not with teaching, to any considerable extent, but with the care and supervision of the young ladies, their classification and general culture. These principals communicate, as occasion may require, with the matrons of the families where the young ladies board. The special discipline of the young ladies is committed to the lady Principal, assisted by a 'Ladies' Board of Managers,' composed in general of wives of professors in the college. The advice of the College Faculty is sometimes taken, but the young ladies do not come before them for special discipline. The regulations of the school, for both ladies and gentlemen, are intended to be addressed to the good sense and personal responsibility of the pupil. We have no monitors, but each one makes a weekly report of success or failure in the performance of prescribed duties: young ladies boarding in families have their report countersigned by the matron of the house, who is in a degree responsible for the conduct of her charge. The ladies' hall is the headquarters of the female department, where the Principal receives all the ladies for general instruction and for personal advice.

Throughout the literary departments the classes consist of young men and young women, taken indiscriminately, as their studies correspond. The larger numbers of both sexes are found in our Pre-

paratory Department—a department which embraces, besides those preparing for the regular courses, a large number that study for a more limited time. This department is under the charge of a gentleman Principal, whose strength is expended chiefly upon oversight, classification, and discipline, and an associate Professor of Languages, who gives himself to the teaching of the advanced classes in Latin and Greek. The other classes in this department are taught by successful pupils (gentlemen and ladies) from the higher departments. After the Preparatory Department, we have two courses open to young ladies—the ‘Ladies’ Course,’ and the regular ‘College Course.’ The Ladies’ Course is a course of four years, requiring, as conditions of entering, a good elementary English education, and a year’s study of Latin. It embraces all the studies of the regular College course, omitting all the Greek and most of the Latin, omitting also the Differential and Integral Calculus, and adding lessons in French and Drawing, and some branches of natural science. Those pursuing this course recite with the college classes in the same studies. Separate classes are organized for the ladies in essay-writing until the commencement of the third year, when they are added to the Junior College class in this exercise. Their training in this department is limited to reading and writing, none of the ladies having any exercise in speaking. The great majority of our young ladies pursue this course, and it was supposed at the organization of the school that nothing farther would be required for them; but in 1837 four young ladies prepared themselves for the Freshman class, and were received upon their own petition. Since that time it has been understood that the College Course is open to young ladies, and we have always had more or less in the classes: sometimes the proportion of ladies to gentlemen in the course has been as high as one to four; at present it is one to ten. We have observed no special tendency to an increase in this proportion; for the last three years there has been a diminution. The ladies in this course are under the same general regulations and discipline as in the other course, and are responsible to the lady Principal. At the termination of their course they receive the regular degree in the Arts. Eighty-four ladies have received this degree, and three hundred and ninety-five have received the diploma of the Ladies’ Course.

The Theological Department has never been opened to ladies, as regular members. Two young ladies attended upon all the exercises of the department through a three-years course, and were entered upon the Annual Catalogue as ‘resident graduates pursuing the Theological course.’ This was nearly twenty years ago, and we

have had no applications since. Doubtless the same privileges would be afforded as formerly.

The association of gentlemen and ladies out of the class-room is regulated as experience seems to require. They sit at the same table in families and in the Ladies' Hall. Young gentlemen call on ladies in a social way, at the parlors of the Ladies' Hall and of private families, between the hour for tea and half-past seven in the winter, and eight o'clock in the summer. They walk in groups from one class-room to another, as convenience and their sense of propriety may dictate, with the help of a suggestion, if needed, from thoughtful and observing friends. Now and then the young ladies have permission to attend an evening lecture given under the auspices of the College, and in such case to accept the attendance of young men. No such association is permitted in the case of religious meetings. They do not ride or walk together beyond the limits of the village, except on a holyday, under special arrangements. There is no association of the sexes in literary societies, or other voluntary and independent organizations.

It seemed necessary to give this detail of arrangements, that the conditions upon which the solution of the problem has been conducted with us may be fully understood. In speaking of results, I wish to be understood as giving not merely my own individual judgment, but the unanimous opinion, so far as I understand it, of all who have had responsibility in connection with the school. If there has been any diversity of sentiment on the subject, it has been unknown to me. Others might choose different terms in which to express their opinions, but I shall endeavor to make no statement from which I suppose that any one of those that are or have been associated in this work would dissent.

Among the advantages which seem to be involved in the system, as we have observed its operation, are the following :

1. Economy of means and forces. The teaching force and other apparatus required in all the higher departments of study is made available to a larger number. In most Western Colleges the higher classes might be doubled without any detriment, and often with great advantage. Scarce any one of these schools has had larger classes than our own, and yet only once or twice have we had occasion to make two divisions in any college class, including the ladies pursuing the same study. In the preparatory department, classes must be multiplied on account of numbers; but in the higher departments of instruction, where the chief expense is involved, the expense is no greater on account of the presence of

ladies. If a separate establishment were attempted for ladies, affording the same advantages, the outlay in men and means would have to be duplicated; or, as would often happen, the force would have to be divided, and the advantages as well. Of course, if there were obvious disadvantages in the arrangement, the argument from economy would have essentially no weight. We must have the best system of higher education at any necessary cost.

2. Convenience to the patrons of the school. It has been a matter of interest with us to note the number of cases in which a brother is accompanied or followed by a sister, or a sister by a brother. I can not give exact statements upon this point; but it is an interesting and prominent feature in our operations. This is most convenient and wholesome; each is safer from the presence of the other; and the inducements to attend school, to the one or the other, are increased by the possibility of having each other's company. The want and tendency in this direction are shown in the fact that in the vicinity of every flourishing college, opened for young men only, a ladies' school, equally flourishing, is almost sure to be established, requiring afterward a good degree of vigilance to keep apart those who have thus naturally come together.

3. Another advantage we find in the wholesome incitements to study which the system affords. This is a want in all schools, provided for often by a marking and grading system involving a distribution of honors and prizes. An acknowledged defect in this plan, not to speak of any thing unwholesome in the spirit of rivalry which it induces, is in the fact that it appeals to comparatively few in a class. The honors are few, and the majority soon cease to strive for them. The social influence arising from the constitution of our classes operates continuously and almost equally upon all. Each desires for himself the best standing that he is capable of, and there is never a lack of motive to exertion.

It will be observed, too, that the stimulus is the same in kind as will operate in after life. The young man, going out into the world, does not leave behind him the forces that have helped him on. They are the ordinary forces of society, and require no new habits of thought or action in order to their effective operation. We have introduced a marking system into the recitation-room, pertaining solely to the performance there, and used for the information of teachers and guardians, and the pupil himself: not for the assignment of grade or distribution of honors, or for any publication whatsoever. We rely upon the natural love of a fair standing with teachers and associates as the supplement to the higher motives for exertion, and have not found it a vain reliance.

4. Again, the social culture which is incidental to the system is a matter of no small importance. To secure this the student does not need to make any expenditure of time, going out of his way, or leaving his proper work for the pleasure or improvement resulting from society. He finds himself naturally in the midst of it, and he adjusts himself to it instinctively. It influences his manners, his feeling, and his thought. He may be as little conscious of the sources of the influence as of the sunlight or the atmosphere; it will envelope him all the same, saving him from the excessive introversion, the morbid fancies, the moroseness, which sometimes arise in secluded study, giving him elasticity of spirits, and ease of movement, and refinement of character, not readily attained out of society. It seems desirable that our young men especially should enjoy these advantages during the period of their course of study, while the forces that form character work most efficiently.

5. Closely connected with this influence is the tendency to good order which we find in the system. The ease with which the discipline of so large a school is conducted has not ceased to be a matter of wonder to ourselves. One thousand students are gathered from every state in the Union, from every class in society, of every grade of culture—the great mass of them, indeed, bent on improvement, but numbers sent by anxious friends with the hope that they may be saved or recovered from wayward tendencies. Yet the disorders incident to such gatherings are essentially unknown among us. Our streets are as quiet by day and by night as in any other country town. There are individual cases of misdemeanor, especially among the new comers, and now and then one is informed that his probation has been unsatisfactory; but in the regularly organized classes of the College and Ladies' Departments, numbering from two to four hundred in constant attendance, the exclusions have not on the average exceeded one in five years, and in one instance a period of more than ten years elapsed without a single exclusion from these classes. This result we attribute greatly to the wholesome influence of the system of joint education. The student feels that his standing and character are of grave consequence to him, and he is predisposed to take a manly attitude in reference to the government and regulations of the school. An admonition in the presence of the students assembled in the chapel has always been more dreaded by an offender than a private dismissal. Offenses against propriety, that in a body of young men forming a separate community would seem to be trivial, change their aspect when the female element is added to the community; and

that better view adds greatly to the force of wholesome regulations. From the beginning, the use of tobacco has been prohibited to our students. In the presence of ladies the regulation has a force and significance that could not be otherwise secured, and has been maintained with a good degree of success. College tricks lose their wit and attractiveness in a community thus constituted. They are essentially unknown among us. There are no secret societies, and, so far as I know, there has been no tendency toward them. The relations of the classes to each other are comfortable and desirable. With a sufficient degree of class feeling to give unity and collective force, there is an entire absence of the antagonisms which sometimes appear in college life. It may be a mistake to attribute this fact in any degree to the social constitution of the school, but it seems to me to be a natural result. The general force of the society controls and limits the clannish tendency. We have had no difficulty in reference to conduct and manners in the college dining-hall. There has been an entire absence of the irregularities and roughnesses so often complained of in college commons.

6. Nor can it be reasonably doubted that the arrangement tends to good order and morality in the town outside of the school. Evils that might be tolerated, in the shape of drinking-saloons and other places of dissipation, if young men only were present, seem intolerable where ladies are gathered with them. The public sentiment requires their suppression. Of course, this influence alone would not be sufficient; but it increases and intensifies the moral forces of the place which withstand their introduction.

7. Another manifest advantage is in the relations of the school to the community—a cordial feeling of good will, and the absence of that antagonism between town and college which in general belongs to the history of universities and colleges. The absence of disorder in the school is the prime condition of this good feeling; but beyond this, the constitution of the school is so similar to that of the community that any conflict is unnatural: the usual occasion seems to be wanting.

8. It can hardly be doubted that young people educated under such conditions are kept in harmony with society at large, and are prepared to appreciate the responsibilities of life, and to enter upon its work. They will not lack sympathy with the popular feeling, or an apprehension of the common interests. They are naturally educated in relation with the work of life, and will not require a readjustment. This seems a matter of grave importance, and we can scarcely be mistaken as to the happy results attained. If we are

not utterly deceived by our position, our students naturally and readily find their work in the world, because they have been trained in sympathy with the world.

These are among the advantages of the system which have forced themselves upon our attention. The list might be extended and expanded; but you will wish especially to know whether we have not encountered disadvantages and difficulties which more than counterbalance these advantages, and you will properly require me to speak with all frankness upon those difficulties which are commonly apprehended.

1. Have young ladies the ability in mental vigor and bodily health to maintain a fair standing in a class with young men? Do they not operate as a check upon the progress of the class, and degrade the standard of scholarship? and do they not break down in health under a pressure which young men can sustain?

To this inquiry I answer, where there has been the same preparatory training, we find no difference in ability to maintain themselves in the recitation room. Under the circumstances, I shall be excused for referring to my own individual experience, which has been somewhat varied. The first eight years of my work as a teacher was in the department of the Ancient Languages—Latin, Greek, and Hebrew; the next eleven, in Mathematics, abstract and applied; the last eight, in Philosophical and Ethical studies. In all these studies my classes have included young women as well as young men, and I have never observed any difference between them in performance in the recitation. The strong and the weak scholars are equally distributed between the sexes.

In this statement I do not imply that I see no difference between the normal male and female mind as to taste for particular studies. I have no doubt of the existence of such differences; but they do not appear in the ability as pupils to comprehend and express the truth. A few days since, on a visit to the University of Michigan, I attended a recitation in Thucydides. So far as could be judged from a single exercise, in which there were many excellent performances, the daughter of the Professor of Greek, the only young lady under the wing of the University, led the class. But it did not strike me as an anomaly; I had often seen such things.

Nor is there any manifest inability on the part of young women to endure the required labor. A breaking down in health does not appear to be more frequent than with young men. We have not observed a more frequent interruption of study on this account; nor do our statistics show a greater draft upon the vital forces in

the case of those who have completed the full college course. Out of eighty-four young ladies who have graduated since 1841, seven have died—a proportion of one in twelve. Of three hundred and sixty-eight young men who have graduated since that date, thirty-four are dead, or a little more than one in eleven. Of these thirty-four young men, six fell in the war; and leaving those out, the proportion of deaths still remains one to thirteen. Taking the whole number of gentlemen graduates, omitting the Theological Department, we find the proportion of deaths one to nine and a-half; of ladies, one to twelve: and this in spite of the lower average expectation of life for women, as indicated in life insurance tables. The field is, of course, too narrow for perfectly conclusive results; but there is no occasion for special apprehension of failure of health to ladies from study.

2. But it is held by many that ladies need a course of study adapted to their nature and their prospective work, and that it must be undesirable to bring them under the same training with young men. The theory of our school has never been that men and women are alike in mental constitution, or that they naturally and properly occupy the same position in the work of life. The education furnished is general, not professional, designed to fit men and women for any position or work to which they may properly be called. Even in the full college curriculum it does not appear that there is any study that would not be helpful in the discipline and furniture of an educated lady. But only a small proportion of young ladies seeking an education will naturally require the full college course. It is not difficult to frame a suitable course parallel with the college course, made up substantially of studies selected from it, and diversified by the addition of the accomplishments supposed to be peculiarly adapted to female culture. Almost every Western college has a scientific course, involving these substantial elements. The best schools in the land for the education of ladies alone have the same course. We do not find that any peculiar style of teaching is required to adapt these studies to female culture. The womanly nature will appropriate the material to its own necessities under its own laws. Young men and women sit at the same table and partake of the same food, and we have no apprehension that the vital forces will fail to elaborate from the common material the osseous and fibrous and nervous tissues adapted to each frame and constitution. Except under pressure of great external violence, the female nature asserts itself by virtue of its own inherent laws. No education can make alike those whom God has made as unlike as men and women.

3. Yet apprehension is felt and expressed that character will deteriorate on one side or on the other; that young men will become frivolous or effeminate, and young women coarse and masculine. The more prevalent opinion seems to be that, while the arrangement may be desirable in its effect on young men, it will be damaging to young women. That young men should become trifling or effeminate, lose their manly attributes and character, from proper association with cultivated young women, is antecedently improbable, and false in fact. It is the natural atmosphere for the development of the higher qualities of manhood—magnanimity, generosity, true chivalry, earnestness. The animal man is kept subordinate, in the prevalence of these higher qualities. We have found it the surest way to make men of boys, and gentlemen of rowdies. It must be a very poor specimen of masculine human nature that is not helped by the association, and a very poor specimen of a woman that does not prove a helper. In my judgment, as the result of experience, the chances are better even for the poor specimen.

But, on the other hand, are not womanly delicacy and refinement of character endangered? Will not the young woman, pursuing her studies with young men, take on their manners and aspirations and aims, and be turned aside from the true ideal of womanly life and character? The thing is scarcely conceivable. The natural response of woman to the exhibition of manly traits is in the correlative qualities of gentleness, delicacy, and grace. It might better be questioned whether the finer shadings of female character can be developed without this natural stimulus. If you would transform a woman into an Amazon or virago, take her apart from well-constituted society, and train her in isolation to a disgust for men, and a rough self-reliance. You will probably fail even thus in your endeavor; but it is the only chance of success.

But it is my duty not to reason, but to speak from the limited historical view assigned me. You would know whether the result with us has been a large accession to the numbers of coarse, 'strong-minded' women, in the offensive sense of the word; and I say, without hesitation, that I do not know of a single instance of such a product as the result of our system of education. It is true that in our 'Triennial' are found the names of three somewhat distinguished lady lecturers, who are some times referred to as belonging to this class. They pursued their studies at Oberlin from four to five years in each case. But, whatever their present position and character may be, I have personal knowledge of the fact that they

came to us very mature in thought, with their views of life settled and their own plans and purposes determined and announced. Whatever help in their chosen life they derived from the advantages afforded them, they have never given us any credit for their more advanced views of woman's rights and duties. While avowing a radical dissent from those views, I can not forbear to say that I am happy to number these ladies among my friends, and to express my admiration of much that is noble and womanly in their character, and of their earnest but mistaken philanthropy.

To show that our system of education does not bewilder woman with a vain ambition, or tend to turn her aside from the work which God has impressed upon her entire constitution, I may state that of the eighty-four ladies that have taken the college course, twenty-seven only are unmarried. Of these twenty-seven, *four* died early, and of the remaining twenty-three, twenty are graduates of less than six years' standing. The statistics of the graduates of the Ladies' Course would give essentially the same result. There may be an apparent indelicacy, perhaps, in parading such private, domestic facts; but the importance of the question upon which they bear will vindicate the propriety.

4. But this view does not touch the exact point of the difficulty. It is in general admitted that the association of young men and women, under proper conditions, is elevating instead of degrading, but there is doubt whether bringing them together in a school provides for these proper associations. The wholesome association of the young requires the presence and influence of those who are mature and have experience and a sense of responsibility,—more of the family influence than can be secured in a large school. Is there not danger that young men and young women thus brought together in the critical period of life, when the distinctive social tendencies which draw the sexes toward each other seem to act with greatest intensity, will fail of that necessary regulative force and fall into undesirable and unprofitable relations? Will not such associations result in weak and foolish love affairs, and in such habits of communication and social life as lead to these and grow out of them.

It is not strange that such apprehensions are felt, nor would it be easy to give an *à priori* answer to such difficulties; but, if we may judge from our experience, the difficulties are without foundation. I have no hesitation in expressing the conviction that in the associations of our young people there is as little of this undesirable element as is found in any general society. The danger in this

direction results from excited imagination,—from the glowing exaggerations of youthful fancy; and the best remedy is to displace these fancies by every-day facts and realities. The young man shut out from the society of ladies, with the help of the high-wrought representations of life which poets and novelists afford, with only a distant vision of the reality, is the one who is in danger. The women whom he sees are glorified by his fancy, and are wrought into his day-dreams and night-dreams as beings of supernatural loveliness. It would be different if he met them day by day in the recitation-room, in a common encounter with an algebraic problem, or at the table sharing in the common want of bread and butter. There is still room for the fancy to work, but the materials for the picture are more reliable and enduring. Such association does not take all the romance out of life, but it gives as favorable conditions for sensible views and actions upon these delicate questions as can be afforded to human nature.

There is another danger to which the young man is exposed greater even than this of a too high-colored ideal of female character. It is too low an estimate, springing from his own sensual tendencies, and darkened by a dash of misanthropy which is one of the most common experiences of the young. Such an ideal degrades the one who indulges it, and mars his whole conception of life. No greater misfortune can befall a young man than to admit to his heart such a misconception. It can spring up only in an isolated life, apart from the society of the pure and the good. It is good for a young man to face the facts, and let his dreams go, whether bright or dark. In the presence of these facts, he will conceive and maintain a genuine respect for women as worthy of his confidence and regard, which will save him from amorous follies on the one side, and from a degrading misanthropy on the other. There may be, here and there, displays of these weaknesses of youth; and where are there not? Among hundreds of the young, such weak ones must be found; but if there is any more potent corrective than the public sentiment of such a company of young people of ordinary good sense, I have not been able to find it.

Of course there is room for the wisdom which comes from experience in regulating the associations of such a school. The danger seems to be in both extremes, of too great strictness and restraint and too great laxity, as in all forms of school discipline. Those who have observed the pressure against restrictions, where there is an attempt to prohibit intercourse, sometimes imagine that any letting-up would prove fatal to all order and propriety. They would

probably be surprised to find that the sense of propriety and self-respect of their pupils would prove a surer reliance than any artificial barriers imposed from without. On the other hand, it is important that the intercourse of the young people be regulated by such restrictions as the good sense of the community will justify—not minute and arbitrary, in an attempt to meet all deficiencies of taste and judgment, and forestall every conceivable impropriety, but comprehensive and suggestive, expanded as occasion may require in familiar and practical suggestions from principal or teacher. It is desirable that the intercourse of the school be easy and natural, not fettered at every step by some restriction. The government of our school would be impossible, except as approved and sustained by the great body of the pupils. It would be easy, but extremely unwise, to surrender this stronghold in the endeavor to fortify ourselves by artificial barriers.

The experience of the Friends in this country in the management of their schools is instructive. For many years they have had boarding-schools at the East and the West, to which they sent both their sons and their daughters, but intended to allow no association between them in the schools. They found the undertaking too great. Walls could not be built that would entirely separate them. Within two or three years the policy has been changed and the walls removed, and, as I am informed, with the happiest results. A regulated association becomes easy now which was impossible before.

5. But will not the young people form such acquaintances as will result, during their course of study or after they leave school, in matrimonial engagements? Undoubtedly they will; and if this is a fatal objection, the system must be pronounced a failure. The majority of young people form such acquaintances between the ages of sixteen and twenty-four, and these are the years devoted to a course of study. It would be a most unnatural state of things if such acquaintances should not be made in a school where young men and young women are gathered in large numbers; nor is it to be expected that marriage engagements even will not be formed more or less frequently. Now and then it may occur that parties will seem to have left school for the purpose of consummating such an engagement. The reasonable inquiry in the case is, whether such acquaintances and engagements can be made under circumstances more favorable to a wise and considerate adjustment, or more promising of a happy result. Are the circumstances such as naturally to promote hasty and ill-assorted marriages? If the sys-

tem were to stand or fall by this one test, its friends would have no occasion to apprehend the result.

6. But what security is there that positive immoralities may not at times occur, and startling scandals even, that shall shock the community and produce distrust of the system? Of course, such a thing might be; but it would scarce be logical to condemn the system on the ground of such possibilities or even actualities. The only pertinent inquiry is whether such immoralities are the more natural and frequent product of this than of other systems. Is the moral atmosphere of the best and most approved Eastern colleges perfectly free from every taint of impurity? Is the propriety of the best-ordered and most carefully-guarded female seminary not liable to be broken in upon by a sporadic offense of this character? Such liabilities go everywhere with fallen human nature; and it has not been shown that the monastic institutions of either ancient or modern times have afforded perfect security upon this point. There may have been a time when one such scandal in a school for joint education would have brought reproach upon the system and overwhelmed it with popular disgust. A generation of successful trial, under a sheltering Providence, should have won for it the impartial judgment which is the right of every system.

7. But is this method adapted to schools in general, or is the success attained at Oberlin due to peculiar features of the school and of the place, which can rarely be found or reproduced elsewhere? This idea is not an unnatural one, and is somewhat prevalent. It is true, we have been favored with some special advantages. The place and the school were founded together—a Christian enterprise, with a common aim. From the beginning, the great interest of the place has been the school. The religious earnestness, in which the enterprise had its birth, has been in some good degree maintained, securing a unity of interest and of action very rare in the history of schools and of communities. The habits of the community have in a good degree taken their shape from the necessities of the school, and there is a very general and hearty interest in all that pertains to its welfare. On the other hand, the village has increased until its population numbers nearly 4000—a population gathered from all parts of the country, with a colored element amounting perhaps to one-fifth of the whole, of every grade of culture and of want of culture, not in any proper sense a disturbing element, but precluding that perfect homogeneity of thought and life embraced in the popular idea of Oberlin society. Our students, too, have been so numerous as to preclude the possibility of ~~an~~

close personal supervision attainable in a smaller school; and while we have had occasion to congratulate ourselves on their general character, their earnest endeavors after improvement and usefulness, still they are essentially like the pupils in other schools at the West between the parallels which embrace the New-England emigration, with the addition of the colored element, varying from five to seven per cent. of the whole.

The experiment was commenced, too, by those who had had no experience in such a school, who had to feel their way through the various questions involved in its organization and arrangement. Thus, with the special advantages of our position, there have been some special difficulties.

But the experiment at Oberlin, if the earliest, is by no means the only one. At least a score of schools have sprung up that have adopted essentially the same plan, and I have yet to learn that there has been any other than a uniform result in the convictions of those who have best understood these movements. There are doubtless advantages in entering upon the plan at the organization of a school instead of introducing it into a college already in existence. The usual style of college life, the traditional customs and habits of action and of thought, are not suited to a school where ladies are gathered as well, and the changes required might occasion difficulty at the outset, and peril the experiment. On this point I have no experience; but I have such confidence in the inherent vitality and adaptability of the system, that I should be entirely willing to see it subjected to this test.

In concluding this statement, permit me to say that I have no special call as an apostle or propagandist of this system of education. The opinions set forth are such as, with my limited experience, I am compelled to cherish, and when called upon, as now, I cheerfully express them.

NOTE.

OBERLIN COLLEGE, and OBERLIN as a settlement or town, originated in the deep religious convictions of the founders of both, which had been awakened and confirmed in the "revivals" of 1830, and the few years following. The author of the plan of the "Collegiate Institute," on the manual labor system, and the "Covenant," under which a tract of land three miles square, and comprising about eight thousand acres, was purchased in Lorain County, at the low rate of one dollar and fifty cents per acre, was Rev. John J. Shipherd, while he was pastor of the Presbyterian church in Elyria in 1832. Associated with him, in public and private prayer and effort, was Mr. P. P. Stewart, a retired missionary among the Cherokees in Mississippi, then residing in Mr. Shipherd's family. The early colonists and students, deeply imbued with the religious spirit which the preachings of Rev. Charles Finney had awakened, entered on the enterprise with missionary zeal, "lamenting the degeneracy of the Church, and the deplorable condition of the perishing world, and ardently desirous of bringing both under the influence of the blessed gospel of peace" and "of glorifying God in doing good to men to the extent of their ability." Assuming the name of the French pastor and educator of the retired parish of Walbach, in the Ban de la Roche, they have achieved, within the period measured by that pastor's labors, an educational success, and made their principles and practices felt in the political and ethical, as well as the educational questions of the day, to an extent which Oberlin never aspired to.

The land was bought in 1832—the first log cabin on the tract, by no means inviting for settlement, was built in April, 1833, and the first college building was extemporized, out of trees felled from the till then untouched forest; in the following summer, a church on the Congregational basis, but in temporary connection with a Presbytery, was gathered in September, and in December a school was opened in "Oberlin Hall," with thirty pupils, which number before the close of May, 1834, was increased to one hundred. And thus was launched an enterprise which, in little more than thirty years, has grown into a village and township of 3000 inhabitants, and according to the annual catalogue of 1867-68, (of fifty-six closely-printed pages,) and an institution (no longer the "Oberlin Collegiate Institute" on the manual labor system, with one undergraduate student of Western Reserve College as teacher,) known throughout the land as OBERLIN COLLEGE, with an endowment of \$160,000, seven buildings, and twenty professors and instructors laboring in a *Theological Department* with 11 students; a *College Department* with 119 students, 9 of whom are ladies in a four years' course; a *Scientific Course* of three years, with 34 students; a *Preparatory Department* with 484 "gentlemen" students; a *Young Ladies' Course* of four years, with 190 students; and a *Ladies' Preparatory Course* with 294 pupils—a grand total of 1134 pupils. Besides these regular courses, there is a "Teachers' Institute" every Fall term, continuing about six weeks, in which special instruction is given to those who propose to teach; a "Winter Vacation School," under the superintendence of the Faculty, in optional studies, commencing at the close of the Autumn term; and a "Conservatory of Music," under a Professor fresh from the Conservatory of Music at Leipzig in Saxony. And in these thirty years, over 15,000 pupils have been instructed to some extent in its various courses. [We shall return to Oberlin.—Ed.]



IX. SCHOOLS FOR PROFESSIONAL EDUCATION OF TEACHERS.

BY JOHN S. HART, LL. D.,

PRINCIPAL OF THE STATE NORMAL SCHOOL AT TRENTON, NEW JERSEY.

NORMAL SCHOOL.

THE term Normal School is an unfortunate misnomer, and its general adoption has led to much confusion of ideas. The word "Normal," from the Latin *norma*, a rule or pattern to work by, does not differ essentially from "Model." A Normal School, according to the meaning of the word, would be a pattern school, an institution which could be held up for imitation, to be copied by other schools of the same grade. But this meaning of the word is not what we mean by the thing. When we mean a school to be copied or imitated, we call it a Model School. Here the name and the thing agree. The name explains the thing. It is very different when we speak of a Normal School. To the uninitiated, the term either conveys no meaning at all; or, if your hearer is a man of letters, it conveys to him an idea which you have at once to explain away. You have to tell him, in effect, that a Normal School is not a Normal School, and then that it is something else, which the word does not in the least describe.

What then do we mean by a Normal School? What is the thing which we have called by this unfortunate name?

A Normal School is a seminary for the professional education of teachers. It is an institution in which those who wish to become teachers learn how to do their work; in which they learn, not reading, but how to teach reading; not penmanship, but how to teach penmanship; not grammar, but how to teach grammar; not geography, but how to teach geography; not arithmetic, but how to teach arithmetic. The idea which lies at the basis of such an institute, is that knowing a thing, and knowing how to teach that thing to others, are distinguishable and very different facts. The knowledge of the subjects to be taught, may be gained at any school. In order to give to the Teachers' Seminary its full power, and efficiency, it were greatly to be desired that the subjects themselves, as mere matters of knowledge, should be first learned elsewhere, before entering the Teachers' School. This latter would then have to do only with its own special function, that of showing its matriculants how to use these materials in the process of teaching. Unfortunately, we have not made such progress in popular education as to be able to separate these two functions to the extent that is desirable. Many of those who attend a Teachers' Seminary, come to it lamentably ignorant of the com-

mon branches of knowledge. They have consequently first to study these branches in the Normal School, as they would study them in any other school. That is, they have first to learn the facts as matters of knowledge, and then to study the art and science of teaching these facts to others. Instead of coming with their brick and mortar ready prepared, that they may be instructed in the use of the trowel and the plumb-line, they have to make their brick and mix their mortar after they enter the institution. This is undoubtedly a drawback and a misfortune. But it cannot be helped at present. All we can do is to define clearly the true idea of the Teacher's School, and then to work towards it as fast and as far as we can.

A Normal School is essentially unlike any other school. It has been compared indeed to those professional schools which are for the study of law, divinity, medicine, mining, engineering, and so forth. The Normal School, it is true, is like these schools in one respect. It is established with reference to the wants of a particular profession. It is a professional school. But those schools have for their main object the communication of some particular branch of science. They teach law, divinity, medicine, mining, or engineering. They aim to make lawyers, divines, physicians, miners, engineers, not teachers of these branches. The Professor in the Law School aims, not to make Professors of law, but lawyers. The medical Professor aims, not to make medical lecturers, but practitioners. To render these institutions analogous to the Teachers' Seminary, their pupils should first study law, medicine, engineering, and so forth, and then sit at the feet of their Gamaliels to be initiated into the secrets of the Professorial chair, that they may in turn become Professors of those branches to classes of their own. Nor would such a plan, if it were possible, be altogether without its value. It surely needs no demonstration to prove, that in the highest departments, no less than in the lowest, something more than knowledge is needed in order to teach. An understanding of how to communicate one's knowledge, and practical skill in doing it, are as necessary in teaching theology, metaphysics, languages, infinitesimal analysis, or chemistry, as they are in teaching the alphabet. If there are bunglers, who know not how to go to work to teach a child its letters, or to open its young mind and heart to the reception of truth, whose school-rooms are places where the young mind and heart are in a state, either of perpetual torpor, or of perpetual nightmare, have these bunglers no analogues in the men of ponderous erudition that sometimes fill the Professor's chair? Have we no examples, in our highest seminaries of learning, of men very eminent in scientific attainments, who have not in themselves the first elements of a teacher? who impart to their students no quickening impulse? whose vast and towering knowledge may make them perhaps a grand feature in their College, attracting to it all eyes, but whose intellectual treasures, for all the practical wants of the students, are of no more use, than are the swathed and buried mummies in the pyramid of Cheops!

A Teacher's Seminary, if it were complete, would include in its curriculum of study the entire cycle of human knowledge, so far as it is taught by schools. Our teachers of mathematics and of logic, of law and of medicine, need indeed a knowledge of the branches which they are to teach, and for this knowledge they do not need a Teachers' Seminary. But they need something more than this knowledge. Besides being men of erudition, they need to be teachers, no less than the humble members of the profession, who have only to teach the alphabet and the multiplication table; and there is in all teaching, high or low something that is common to them all—an art and a skill that is different from the mere knowledge of the subjects; which is not necessarily learned in learning the subjects; which requires special, superadded gifts, and distinct study and training. There is, according to my observation, as great a lack of this special skill in the higher seminaries of learning, as in the lower seminaries. Were it possible to have a Normal School, not which should undertake to teach the entire encyclopædia of the sciences, but which, limiting itself to its one main function of developing the art and mystery of communicating knowledge, should turn out College Professors, and even Divinity, Law, and Medical Professors,—men who are really skillful teachers,—it would work a change in those venerable institutions as marked and decisive as that which it is now effecting in the common schools. Of course, no such scheme is possible; certainly, none such is contemplated. But I am very sure I shall not be considered calumnious, when I express the conviction, that there are learned and eminent occupants of Professors' chairs, who might find great benefit in an occasional visit to a good Normal School, or even to the classroom of a teacher trained in a Normal School. I certainly have seen, in the very lowest department of the common school, a style of teaching, which, for a wise and intelligent comprehension of its object, and for its quickening power upon the intellect and conscience, would compare favorably with the very best teaching I have ever seen in a College or University.

I come back, then, to the point from which I set out, namely, that a Normal School, or Teachers' Seminary, differs essentially from every other kind of school. It aims to give the knowledge and skill that are needed alike in all schools. To make the point a little plainer, let me restate, with what clearness I can, some of the elementary truths and facts which lie at the foundation of the whole subject. Though to many of my readers it may be going over a beaten track, it may not be so to all; and we all do well, even in regard to known and admitted truths, to bring them occasionally afresh to the mind.

As it has been already said, a man may know a thing perfectly, and yet not be able to teach it. Of course, a man cannot teach what he does not know. He must first have the knowledge. But the mere possession of knowledge does not make one a teacher, any more than the possession of powder and shot makes him a marksman, or the possession of a rod

and line makes him an angler. The most learned men are often unfortunately the very men who have the least capacity for communicating what they know. Now is this incapacity confined to those versed in book knowledge. It is common to every class of men, and to every kind of knowledge. Let me give an example. The fact about to be stated, was communicated to me by a gentleman of eminent commercial standing in Philadelphia, now the President of one of its leading banks. The fact occurred in his own personal experience. He was, at the time of its occurrence, largely engaged in the cloth trade. His faculties of mind and body, and particularly his sense of touch, had been so trained in this business, that in going rapidly over an invoice of cloth, as his eye and hand passed in quick succession from piece to piece, in the most miscellaneous assortment, he could tell instantly the value of each, with a degree of precision, and a certainty of knowledge, hardly credible. A single glance of the eye, a single touch, transient as thought, gave the result. His own knowledge of the subject, in short, was perfect, and it was rapidly winning him a fortune. Yet when undertaking to explain to a younger and less experienced member of the craft whom he wished to befriend, by what process he arrived at his judgment, in other words, to teach what he knew, he found himself utterly at a loss. His thoughts had never run in that direction. "Oh!" said he, "you have only—to look at the cloth, and—and—to run your fingers over it,—thus. You will perceive at once the difference between one piece and another." It seems never to have occurred to him that another man's sensations and perceptions might in the same circumstances be quite different from his, and in order to communicate his knowledge to one uninitiated, he must pause to analyse it; he must separate, classify, and name those several qualities of the cloth of which his senses took cognizance; he must then ascertain how far his interrogator perceived by his senses the same qualities which he himself did, and thus gradually get on common ground with him.

Let the receiving-teller of a bank be called upon to explain how it is that he knows at a glance a counterfeit bill from a genuine one, and in nine cases out of ten he will succeed no better than the cloth merchant did. Knowing and communicating what we know, doing and explaining what we do, are distinct, separable, and usually very different processes.

Similar illustrations might be drawn from artists, and from men of original genius in almost every profession, who can seldom give any intelligible account of how they achieve their results. The mental habits best suited for achievement are rarely those best suited for teaching. Marlborough, so celebrated for his military combinations, could never give any intelligible account of his plans. He had arrived at his conclusions with unerring certainty, but he was so little accustomed to observing his own mental processes, that he utterly failed in attempting to make them plain to others. He saw the points himself with perfect clearness, but he had no power to make others see them. To all objections to his plans, he

could only say, "Silly, silly, that's silly." It was much the same with Oliver Cromwell. It is so with most men who are distinguished for action and achievement. Patrick Henry would doubtless have made but a third-rate teacher of elocution, and old Homer but an indifferent lecturer on the art of poetry.

To acquire knowledge ourselves, then, and to put others in possession of what we have acquired, are not only distinct intellectual processes, but they are quite unlike. In the former case, the faculties merely go out towards the objects to be known, as in the case of the cloth merchant passing his eye and finger over the bales of cloth. But in the case of one attempting to teach, several additional processes are needed, besides that of collecting knowledge. He must turn his thoughts inward, so as to arrange and classify properly the contents of his intellectual storehouse. He must then examine his own mind, his intellectual machinery, so as to understand precisely how the knowledge came in upon himself. He must lastly study the minds of his pupils, so as to know through what channels the knowledge will best reach them. The teacher may not always be aware that he does all these things, that is, he may not always have a theory of his own art. But the art itself he must have. He must first get the knowledge of the things to be taught; he must secondly study his knowledge; he must thirdly study himself; he must lastly study his pupil. He is a teacher at all only so far as he does at least these four things.

In a Normal School, as before said, the knowledge of the subject is presupposed. The object of the Normal School is, not so much to make arithmeticians and grammarians, for instance, as to make teachers of arithmetic and grammar. This teaching faculty is a thing by itself; and quite apart from the subject matter to be taught. It underlies every branch of knowledge, and every trade and profession. The theologian, the mathematician, the linguist, the learned professor, no less than the teacher of the primary school, or of the Sabbath-school, all need this supplementary knowledge and skill, in which consists the very essence of teaching. This knowledge of how to teach is not acquired by merely studying the subject to be taught. It is a study by itself. A man may read familiarly the *Mechanique Celeste*, and yet not know how to teach the multiplication table. He may read Arabic or Sanskrit, and not know how to teach a child the alphabet of his mother tongue. The Sabbath-school teacher may dip deep into biblical lore, he may ransack the commentaries, and may become, as many Sabbath-school teachers are, truly learned in Bible knowledge, and yet be utterly incompetent to teach a class of children. He can no more hit the wandering attention, or make a lodgment in the minds of his youthful auditory, than the mere unskilled possessor of a fowling-piece can hit a bird upon the wing.

THE ART OF TEACHING.

The art of teaching is the one indispensable qualification of the teacher.

Without this, whatever else he may be, he is no teacher. How may this art be acquired? In the first place, many persons pick it up, just as they pick up many other arts and trades,—in a hap-hazard sort of way. They have some natural aptitude for it, and they grope their way along, by guess and by instinct, and through many failures, until they become good teachers, they hardly know how. To rescue the art from this uncertainty and chance, is the object of the Normal School. In such a school, the main object of the pupil is to learn how to make others know what he himself knows. The whole current of his thoughts and studies is turned into this channel. Studying how to teach, with an experimental class to practice on, forms the constant topic of his meditations. It is surprising how rapidly, under such conditions, the faculty of teaching is developed; how fertile the mind becomes in devising practical expedients, when once the attention is roused and fixed upon the precise object to be attained, and the idea of what teaching really is, fairly has possession of the mind. In furtherance of this end, every well-ordered Normal School has, in connection with it, and as part of its organization, a Model School, to serve the double purpose of a school of observation, and a school of practice. Thus, after these pupil-teachers are once thoroughly familiar with the branches to be taught, and after they have become acquainted with the theory of teaching, as a science, it is surprising how soon, with even a little of this practice-teaching, they acquire the art. If the faculty of teaching is in them at all, a few experimental lessons, under the eye of an experienced teacher, will develop it. The fact of possessing within one's self the teaching gift, sometimes breaks upon the possessor himself with all the force of a surprising and most delightful discovery. The good teacher does not indeed stop here. He goes on to improve in his art as long as he lives. But his greatest single achievement is when he takes the first step,—when he first learns to teach at all. The pupil of a Normal School gains there a start, an impulse, which carries him forward the rest of his life. Thus a very little judicious experimental training redeems hundreds of candidates from utter and pitiful incompetency, and converts for them an awkward and painful drudgery into keen, hopeful, and productive labor.

TEACHING.

But what is teaching? Unless our ideas on this point are clear and well defined, it is in vain to look for any satisfactory results. Teaching, then, in the first place, is not simply telling. A class may be told a thing twenty times over, and yet not know it. Talking to a class is not necessarily teaching. We have known many teachers, who were brimful of information, and were good talkers, and who discoursed to their classes with ready utterance a large part of the time allotted to instruction, yet an examination of their classes showed little advancement in knowledge.

There are several time-honored metaphors on this subject, which need to be received with some grains of allowance, if we would get an exact

idea of what teaching is. Chiselling the rude marble into the finished statue, giving the impression of the seal upon the soft wax, pouring water into an empty vessel,—all these comparisons lack one essential element of likeness. The mind is indeed, in one sense, empty, and needs to be filled. It is yielding, and needs to be impressed. It is rude, and needs polishing. But it is not, like the marble, the wax, or the vessel, a passive recipient of external influences. It is itself a living power. It is acted upon only by stirring up its own activities. The operative upon mind, unlike the operative upon matter, must have the active, voluntary coöperation of that upon which he works. The teacher is doing his work, only so far as he gets work from the scholar. The very essence and root of the work are in the scholar, not in the teacher. No one, in fact, in an important sense, is taught at all, except so far as he is self-taught. The teacher may be useful, as an auxiliary, in causing this action on the part of the scholar. But the one, indisputable, vital thing, in all learning, is in the scholar himself. The old Romans, in their word education, (*educere*, to draw out) seem to have come nearer to the true idea than any other people have done. The teacher is to draw out the resources of the pupil. Yet even this word comes short of the exact truth. The teacher must put in, as well as draw out. No process of mere pumping will draw out of a child's mind knowledge which is not there. All the power of the Socratic method, could it be applied by Socrates himself, would be unavailing to draw from a child's mind, by mere questioning, a knowledge, for instance, of chemical affinity, of the solar system, of the temperature of the Gulf Stream, of the doctrine of the resurrection.

What then is teaching? Teaching is causing any one to know. Now no one can be made to know a thing, but by the act of his own powers. His own senses, his own memory, his own powers of reason, perception, and judgment must be exercised. The function of the teacher is to bring about this exercise of the pupil's faculties. The means to do this are infinite in variety. They should be varied according to the wants and the character of the individual to be taught. One needs to be told a thing; he learns most readily by the ear. Another needs to use his eyes; he must see a thing, either in the book, or in nature. But neither eye nor ear, nor any other sense or faculty will avail to the acquisition of knowledge, unless the power of attention is cultivated. Attention, then, is the first act or power of the mind that must be roused. It is the very foundation of all progress in knowledge, and the means of awakening it constitute the first step in the educational art.

When by any means, facts, positive knowledge, are once in possession of the mind, something must next be done to prevent their slipping away. You may tell a class the history of a certain event, or you may give them a description of a certain place, or person, or you may let them read it, and you may secure such a degree of attention, that at the time of the reading or the description, they shall have a fair, intelligible comprehension of what has been described or read. The facts are for the time

actually in the possession of the mind. Now, if the mind was, according to the old notion, merely a vessel to be filled, the process would be complete. But mind is not an empty vessel. It is a living essence, with powers and processes of its own. And experience shows us, that in the case of a class of undisciplined pupils, facts, even when fairly placed in the possession of the mind, often remain there about as long as the shadow of a passing cloud remains upon the landscape, and make about as much impression.

The teacher must seek not only to get knowledge into the mind, but to fix it there. In other words, the power of the memory must be strengthened. Teaching, then, most truly, and in every stage of it, is a strictly coöperative process. You cannot cause any one to know, by merely pouring out stores of knowledge in his hearing, any more than you can make his body grow by spreading the contents of your market-basket at his feet. You must rouse his power of attention, that he may lay hold of, and receive, and make his own, the knowledge you offer him. You must awaken and strengthen the power of memory within him, that he may retain what he receives, and thus grow in knowledge, as the body by a like process grows in strength and muscle. In other words, learning, so far as the mind of the learner is concerned, is a growth; and teaching, so far as the teacher is concerned, is doing whatever is necessary to cause that growth.

Let us proceed a step farther in this matter. One of the ancients observes that a lamp loses none of its own light by allowing another lamp to be lit from it. He uses the illustration to enforce the duty of liberality in imparting our knowledge to others. Knowledge he says, unlike other treasures, is not diminished by giving.

The illustration fails to express the whole truth. This imparting of knowledge to others, not only does not impoverish the donor, but it actually increases his riches. *Docendo discimus*. By teaching we learn. A man grows in knowledge by the very act of communicating it. The reason for this is obvious. In order to communicate to the mind of another a thought which is in our own mind, we must give to the thought definite shape and form. We must handle it and pack it up for safe conveyance. Thus the mere act of giving a thought expression in words, fixes it more deeply in our own minds. Not only so, we can, in fact, very rarely be said to be in full possession of a thought ourselves, until by the tongue or the pen we have communicated it to somebody else. The expression of it, in some form, seems necessary to give it, even in our own minds, a definite shape and a lasting impression. A man who devotes himself to solitary reading and study, but never tries in any way to communicate his acquisitions to the world, or enforce his opinions upon others, rarely becomes a learned man. A great many confused, dreamy ideas, no doubt, float through the brain of such a man. But he has little exact and reliable knowledge. The truth is, there is a sort of indolent, listless absorption of intellectual food, that tends to idiocy. I know a

person once, a gentleman of wealth and leisure, who having no taste for social intercourse, and no material wants to be supplied, which might have required the active exercise of his powers, gave himself up entirely to solitary reading, as a sort of luxurious self-indulgence. He shut himself up in his room, all day long, day after day, devouring one book after another, until he became almost idiotic by the process, and he finally died of softening of the brain. Had he been compelled to use his mental acquisitions in earning his bread, or had the love of Christ constrained him to use them in the instruction of the poor and the ignorant, he might have become not only a useful, but a learned man.

We see a beautiful illustration of this doctrine in the case of Sabbath-school teachers, and one reason why persons so engaged usually love their work, is the benefit which they find in it for themselves. I speak here, not of the spiritual, but of the intellectual benefit. By the process of teaching others, they are all the while learning. This advantage in their case is all the greater, because it advances them in a kind of knowledge in which, more than in any other kind of knowledge, men are wont to become passive and stationary. In ordinary worldly knowledge, our necessities make us active. The intercourse of business and of pleasure even, makes men keen. On these subjects we are all the while bandying thoughts to and fro, we are accustomed to give as well as take, and so we keep our intellectual armor bright, and our thoughts well defined. But in regard to growth in scriptural knowledge, we have a tendency to be mere passive recipients, like the young man just referred to. Sabbath after Sabbath we hear good, instructive, orthodox discourses, but there is no active putting forth of our own powers in giving out what we thus take in, and so we never make it effectually our own. The absorbing process goes on, and yet we make no growth. The quiescent audience is a sort of exhausted receiver, into which the stream from the pulpit is perennially playing, but never making it full. Let a man go back and ask himself, what actual scriptural knowledge have I gained by the sermons of the last six months? What in fact do I retain in my mind, at this moment, of the sermons I heard only last Sabbath? So far as the hearing of sermons is concerned, the Sabbath-school teacher may perhaps be no better off than other hearers. But in regard to general growth in Biblical knowledge, he advances more rapidly than his fellow worshippers, because the exigencies of his class compel him to a state of mind the very opposite of this passive reciprocity. He is obliged to be all the while, not only learning, but putting his acquisitions into definite shape for use, and the very act of using these acquisitions in teaching a class, fixes them in his own mind, and makes them more surely his own.

I have used this instance of the Sabbath-school teacher because it enforces an important hint already given, as to the mode of teaching. Some teachers, especially in Sabbath-schools, seem to be ambitious to do a great deal of talking. The measure of their success, in their own eyes, is their ability to keep up a continued stream of talk for the greater part of the hour. This is of course better than the embarrassing silence

sometimes seen, where neither teacher nor scholar has anything to say. But at the best, it is only pouring into the exhausted receiver enacted over again. We can never be reminded too often, that there is no teaching except so far as there is active coöperation on the part of the learner. The mind receiving must reproduce and give back what it gets. This is the indispensable condition of making any knowledge really our own. The very best teaching I have ever seen, has been where the teacher said comparatively little. The teacher was of course brimfull of the subject. He could give the needed information at exactly the right point, and in the right quantity. But for every word given by the teacher, there were many words of answering reproduction on the part of the scholars. Youthful minds under such tutelage grow apace.

It is indeed a high and difficult achievement in the educational art, to get young persons thus to bring forth their thoughts freely for examination and correction. A pleasant countenance and a gentle manner, inviting and inspiring confidence, have something to do with the matter. But, whatever the means for accomplishing this end, the end itself is indispensable. The scholar's tongue must be unloosed, as well as the teacher's. The scholar's thoughts must be broached as well as the teacher's. Indeed, the statement needs very little qualification or abatement, that a scholar has learned nothing from us except what he has expressed to us again in words. The teacher who is accustomed to harangue his scholars with a continuous stream of words, no matter how full of weighty meaning his words may be, is yet deceiving himself, if he thinks that his scholars are materially benefited by his intellectual activity, unless it is so guided as to awaken and exercise theirs. If, after a suitable period, he will honestly examine his scholars on the subjects, on which he has himself been so productive, he will find that he has been only pouring water into a sieve. Teaching can never be this one-sided process. Of all the things we attempt, it is the one most essentially and necessarily a coöperative process. There must be the joint action of the teacher's mind and the scholar's mind. A teacher teaches at all, only so far as he causes this co-active energy of the pupil's mind.

THE ART OF QUESTIONING.

It cannot be too often repeated, the measure of a teacher's success, is not what he himself does, but what he gets his scholars to do. In nothing is this more noticeable, than in the different modes of putting a question to a scholar. One teacher will put a question in such a manner as to find out exactly how much or how little of the subject the child knows, and thereby encourage careful preparation; to give the pupil an open door, if he really knows the subject, to express his knowledge in a way that will be a satisfaction and a pleasure to him; to improve his power of expression, to cultivate his memory, to increase his knowledge, and to make it more thorough and definite. Another teacher will put his questions so as to secure none of these ends, but on the contrary so as to induce a most lamentable degree of carelessness and inaccuracy. Let me

illustrate this point, taking an example for greater convenience from a scriptural subject. Suppose it be a lesson upon Christ's temptation, as recorded in the 4th chapter of Matthew. The dialogue between teacher and scholar may be supposed to proceed somewhat in this wise:

Teacher. Who was led up of the Spirit into the wilderness to be tempted of the devil?

Pupil. Jesus.

T. Yes. Now when Jesus had fasted forty days and forty nights, he was afterward a—— what?. How did he feel after that?

P. Hungry.

T. Yes, that is right. He was afterward "ahungred." Now then?—the next scholar. Who then came to Jesus and said, if thou be the Son of God, command that these stones be made bread?

(Scholar hesitates.)

T. The t——?

P. The tempter.

T. Yes, you are right. It was the tempter. Who do you think was meant by the tempter?—the devil?

P. Yes.

T. When a man has fasted, that is, has eaten nothing, for forty days and forty nights, and feels very hungry, would the suggestion of an easy mode of getting food be likely to be a strong temptation to him, or would it not?

P. It would.

T. Yes, you are right again. It would be a strong temptation to him.

I need not pursue this dialogue further. The reader will see at once how there may thus be the appearance of quite a brisk and fluent recitation, to which however the pupil contributes absolutely nothing. It requires nothing of him in the way of preparation, and only the most indolent and profitless use of his faculties while reciting. He could hardly answer amiss, unless he were an idiot, and yet he has the appearance, and he is often flattered into the belief, of having given some evidence of knowledge and proficiency.

The opposite extreme from the method just exhibited, is that known as the topical method. It is the method pursued in the higher classes of schools, and among more advanced students. In the topical method, the teacher propounds a topic or subject, sometimes in the form of a question, but more commonly only by a title, a mere word or two, and then calls upon the pupil to give, in his own words, a full and connected narration or explanation of the subject, such as the teacher himself would give, if called upon to narrate or explain it. The subject already suggested, if propounded topically, would be somewhat in this wise:

The first temptation of Jesus.

Or, more fully: Narrate the circumstances of the first temptation of Jesus, and show wherein his virtue was particularly tried in that transaction.

The teacher, having propounded the subject clearly to the class, then waits patiently, maintaining silence himself, and requiring the members of the class to be silent and attentive, until the pupil interrogated is quite through, not hurrying him, not interrupting him, even with mis-called helps and hints, but leaving him to the free and independent action of his own faculties, in giving as full, connected, and complete an account of the

matter as he can. When the pupil is quite through, the teacher then, but not before, makes any corrections or additional statements that may seem to be needed. In such an exercise as this, the pupil finds the absolute necessity of full and ample preparation; he has a powerful and healthy stimulus thus to prepare, in the intellectual satisfaction which one always feels in the successful discharge of any difficult task; and he acquires a habit of giving complete and accurate expression to his knowledge, by means of entire sentences, and without the help of "catch words," or leading-strings of any kind.

Some classes, of course, are not sufficiently advanced to carry out fully the method here explained. But there are many intermediate methods, founded on the same principle, and suited to children in every stage of advancement. Only let it be understood, whatever the stage, that the object of the recitation is, not to show what the teacher can say or do, but to secure the right thing being said and done by the pupil.

To recur once more to the same subject, the temptation of Christ. For a very juvenile class, the questioning might proceed on this wise:

T. Where was Jesus led after his baptism?

P. He was led into the wilderness.

T. By whom was he led there?

P. He was led by the Spirit.

T. For what purpose was he led into the wilderness?

P. He was led into the wilderness to be tempted.

T. By whom was he to be tempted?

P. He was to be tempted by the devil.

T. What bodily want was made the means of his first temptation?

If the class is quite young, and this question seems too difficult, the teacher, instead of asking it, or after asking it and not getting a satisfactory answer, might say to his class, that Jesus was first tempted through the sense of hunger. He was very hungry, and the devil suggested to him an improper means of relieving himself from the inconvenience. He might then go on with some such questions as these:

T. What circumstance is mentioned as showing how very hungry he must have been?

P. He had fasted forty days and forty nights.

T. Mention any way in which *you* might be tempted to sin, if you were suffering from hunger?

The foregoing questions, it will be perceived, are very simple, being suited to scholars just advanced beyond the infant class. Yet no one of the questions, in its form or terms, necessarily suggests the answer. No one of them can be answered by a mere "yes" or "no." No scholar, unacquainted with the subject, and with his book closed, can guess at the answer from the way in which the question is put. Not a question has been given, simple as they all are, which does not require at least some preparation, and which does not, to some extent, give exercise to the pupil's memory, his judgment, and his capacity for expression.

If the class is more advanced, the questions may be varied, so as to task and exercise these faculties more seriously. For instance, the teacher of a class somewhat older might be imagined to begin the exercise thus:

T. After the baptism of Jesus, which closes the 3d chapter of Matthew, we have an account of several temptations to which he was exposed. Now, open

your books at the 4th chapter and see if you can find out how many verses are occupied with the narrative of these temptations, and at what verse each temptation begins.

The teacher then requires all the class to search in silence, and each one to get ready to answer, but lets no answer be given until all are prepared. When all have signified their readiness, some one is designated to give the answer.

The books being closed, the questioning begins:

T. Name the different places into which Jesus was taken to be tempted, and the verse in which each place is named.

P. It is said in the 1st verse that Jesus was led up into the wilderness; in the 5th verse that he was taken up into the holy city, and set on a pinnacle of the temple; and in the 8th verse, that he was taken up into an exceedingly high mountain.

T. What was the condition of Jesus, when the devil proposed his first temptation?

P. He had been fasting forty days and forty nights, and he was very hungry.

I need not multiply these illustrations. I have not made the matter entirely in vain, if I have succeeded in producing in the mind of the reader the conviction of these two things; first, that it is a most important and difficult part of the teacher's art, to know how to ask a question; and, secondly, that the true measure of the teacher's ability is, not so much what he himself is able to say to the scholars, as the fulness, the accuracy and the completeness of the answers which he gets from them.

TEACHING AND TRAINING.

Before leaving this part of the subject, and that there may be no possible misunderstanding on these elementary points, it seems proper that I should here explain briefly the difference between teaching and training, two processes which practically run into each other a good deal, but which nevertheless ought not to be confounded. Training implies more or less of practical application of what one has been taught. One may be taught, for instance, the exact forms of the letters used in writing, so as to know at once by the eye whether the letters are formed correctly or not. But only training and practice will make him a penman. Training refers more to the formation of habits. A child may be taught by reasoning the importance of punctuality in coming to school. But he is trained to the habit of punctuality only by actually coming to school in good time, day after day.

The human machine on which the teacher acts, is in its essential nature different from the material agencies operated on by other engineers. It is, as I have once and again said, a living power, with laws and processes of its own. Constant care, therefore, must be exercised, in the business of education, not to be misled by analogies drawn from the material world. The steam engine may go over its appointed task, day after day, the whole year round, and yet, at the end of the year, it will have no more tendency to go than before its first trip. Not so the boy. Going begets going. By doing a thing often, he acquires a facility, an inclination, a tendency, a habit of doing it. If a teacher or a parent succeeds in getting a child to do a thing once, it will be easier to get him to do it a second time, and still easier, a third time.

A teacher who is wise, when he seeks to bring about any given change in a child, whether it be intellectual or moral, will not ordinarily attempt to produce the change all at once, and by main force. He will not rely upon extravagant promises on the one side, nor upon scolding, threats, and violence on the other. Solomon hits the idea exactly, when he speaks of "leading in the way of righteousness." We must take the young by the hand and lead them. When we have led them over the ground once, let us do it a second time, and then a third time, and so keep on, until we shall have established with them a routine, which they will continue to follow of their own accord, when the guiding hand which first led them is withdrawn. *This is training.*

The theory of it is true, not only in regard to things to be done, which is generally admitted, but also in regard to things to be known, which is often ignored if not denied. A boy, we will say, has a repugnance to the study of arithmetic. Perhaps he is particularly dull of comprehension on that subject. We shall not remove that repugnance by railing at him. We shall never make him admire it by expatiating on its beauties. It will not become clear to his comprehension by our pouring upon it all at once a sudden and overpowering blaze of light in the way of explanation. Such a process rather confounds him. Here again let us fall back upon the method of the great Teacher, "Line upon line, precept upon precept." We will first patiently conduct our boy through one of the simplest operations of arithmetic, say, a sum in addition. The next day we will conduct him again through the same process, or through another of the same sort. The steps will gradually become familiar to his mind, then easy, then clear. He learns first the practice of arithmetic, then the rules, then the relations of numbers, then the theory on which the rules and the practice are based, and finally, he hardly knows how, he becomes an arithmetician. He has been trained into a knowledge of the subject.

You wish to teach a young child how to find a word in a dictionary. You give at first, perhaps, a verbal description of the mystery of a dictionary. You tell him that, in such a book, all the words are arranged according to the letters with which they begin; that all the words beginning with the letter A are in the first part of the book. Then those beginning with the letter B, then those beginning with C, and so on; you tell him that all the words beginning with one letter, covering some one or two hundred pages, are again re-arranged among themselves according to the second letter of each word, and then again still further re-arranged according to the third letter in each, and so on to the end. Arouse his utmost attention, and explain the process with the greatest clearness that words can give, and then set him to find a word. See how awkward will be his first attempt, how confused his ideas, how little he has really understood what you have told him. You must repeat your directions patiently, over and over, "line upon line"; you must take him by the hand, day after day, and train him into a knowledge of even so apparently simple a thing as finding a word in a dictionary.

While teaching and training are thus distinguishable in theory, in practice they are well nigh inseparable. At least, they never should be separated. Teaching has never done its perfect work, until, by training, the mind has learned to run in accustomed channels, until it sees what is true, and feels what is right, with a clearness, force, and promptitude, which come only from long-continued habit.

Supposing a man to know clearly what teaching is, and to have himself the gift, how endless are the modes by which it is to be exercised! How numerous are the methods of doing even that one function of the teacher's office, the hearing of recitations! It may be well to occupy a little space, in considering two or three of these modes, by way of still farther illustrating the subject, and before drawing the general conclusion to which all these illustrations point.

METHODS OF HEARING RECITATIONS.

The first that I shall name is called the concert method. This is practiced chiefly in schools for very young children, especially for those who cannot read. There are many advantages, in this method, some of which are not confined to infant classes. The timid, who are frightened by the sound of their own voices when attempting to recite alone, are thereby encouraged to speak out, and those who have had any experience with such children, know that this is no small, or easy, or unimportant achievement. Another benefit of the method is the pleasure it gives the children. The measured noise and motion connected with such concert exercises, are particularly attractive to young children. Moreover, one good teacher, by the use of this method, may greatly multiply his efficiency. He may teach simultaneously fifty or sixty, instead of teaching only five or six. But in estimating this advantage, one error is to be guarded against. Visitors often hear a large class of fifty or more go through an exercise of this kind, in which the scholars have been drilled to recite in concert, and if such persons have never been accustomed to investigate the fact, they often suppose that the answers given are the intelligent responses of all the members of the class. The truth is, however, in very many such cases, that only some half-dozen or so really recite the answers from their own independent knowledge. These serve as leaders; the others, sheep-like, follow. Still, by frequent repetition, even in this blind way, something gradually sticks to the memory, although the impression is always apt to be vague and undefined.

The method of reciting in concert is, in my opinion, chiefly useful in reciting rules and definitions, or other matters, where the very words are to be committed to memory. The impression of so large a body of sound upon the ear is very strong, and is a great help in the matter of mere verbal recollection. Children too are very sympathetic, and a really skillful teacher, by the concert method, can do a great deal in cultivating the emotional nature of a large class.

Young children, too, it should be remembered, like all other young

animals, are by nature restless and fidgety, and like to make a noise. It is possible, indeed, by a system of rigorous and harsh repression, to restrain this restlessness, and to keep these little ones for hours in such a state of decorous primness as not to molest weak nerves. But such a system of forced constraint is not natural to children, and is not a wise method of teaching. Let the youngsters make a noise; I had almost said, the more noise the better, so it be duly regulated. Let them exercise, not only their lungs, but their limbs, moving in concert, rising up, sitting down, turning round, marching, raising their hands, pointing to objects to which their attention is called, looking at objects which are shown to them. Movement and noise are the life of a child. They should be regulated, indeed, but not repressed. To make a young child sit still and keep silence for any great length of time, is next door to murder. I verily believe it sometimes is murder. The health, and even the lives of these little ones, are sacrificed to a false theory of teaching. There is no occasion for torturing a child in order to teach him. God did not so mean it. Only let your teaching be in accordance with the wants of his young nature, and the school-room will be to him the most attractive spot of all the earth. Time and again have I seen the teacher of a primary school obliged at recess to compel her children to go out of doors, so much more pleasant did they find the school-room than the play-ground.

Quite the opposite extreme from the concert method, is that which, for convenience, may be called the individual method. In this method, the teacher examines one scholar alone upon the whole lesson, and then another, and so on, until the class is completed.

The only advantage claimed for this method is that the individual lag-gard cannot screen his deficiencies, as he can when reciting in concert. He cannot make believe to know the lesson by lazily joining in with the general current of voice when the answers are given. His own individual knowledge, or ignorance, stands out. This is clear, and so far it is an advantage. But ascertaining what a pupil knows of a lesson, is only one end, and that by no means the most important end of a recitation. This interview between the pupil and teacher, called a recitation, has many ends besides that of merely detecting how much of a subject the pupil knows. A far higher end is to make him know more,—to make perfect that knowledge which the most faithful preparation on the part of the pupil always leaves incomplete.

The disadvantages of the individual method are obvious. It is a great waste of time. If a teacher has a class of twenty, and an hour to hear them in, it gives him but three minutes for each pupil, supposing there are no interruptions. But we know there always are interruptions. In public schools the class oftener numbers forty than twenty, and the time for recitation is oftener half an hour than an hour. The teacher who pursues the individual method to its extreme, will rarely find himself in possession of more than one minute to each scholar. In so brief a time, very little can be ascertained as to what the scholar knows of the lesson,

and still less can anything be done to increase that knowledge. Moreover, while the teacher is bestowing his small modicum of time upon one scholar, all the other members of the class are idle, or worse.

Teaching, of all kinds of labor, is that in which labor-saving and time-saving methods are of the greatest moment. The teacher who is wise, will aim so to conduct a recitation that, first, his whole time shall be given to every scholar; and secondly, the scholar's mind shall be exercised with every part of the lesson, and just as much when others are reciting, as when it is his own time to recite. A teacher who can do this is teaching every scholar, all the time, just as much as if he had no scholar but that one.

Even this does not state the whole case. A scholar in such a class learns more in a given time, than he would if he were alone, and the teacher's entire time were given exclusively to him. The human mind is wonderfully quickened by sympathy. In a crowd each catches, in some mysterious manner, an impulse from his fellows. The influence of associated numbers, all engaged upon the same thought, is universally to rouse the mind to a higher exercise of its powers. A mind that is dull, lethargic, and heavy in its movements, when moving solitarily, often effects, when under a social and sympathetic impulse, achievements that are a wonder to itself.

The teacher, then, who knows how thus to make a unit of twenty or thirty pupils, really multiplies himself twenty or thirty-fold, besides giving to the whole class an increased momentum such as always belongs to an aggregated mass. I have seen a teacher instruct a class of forty in such a way, as, in the first place, to secure the subordinate end of ascertaining and registering with a sufficient degree of exactness how much each scholar knows of the lesson by his own preparation, and secondly, to secure, during the whole hour, the active exercise and coöperation of each individual mind, under the powerful stimulus of the social instinct, and of a keenly awakened attention. Such a teacher accomplishes more in one hour than the slave of the individual method can accomplish in forty hours. A scholar in such a class learns more in one hour than he would learn in forty hours, in a class of equal numbers taught on the other plan. Such teaching is labor-saving and time-saving, in their highest perfection, employed upon the noblest of ends.

OBSERVING A PROPER ORDER IN THE DEVELOPMENT OF THE FACULTIES.

But besides these questions of methods, there are other and higher questions, growing out of what may be called the philosophy of education. One of these relates to the observance of a proper order in the development of the mental faculties, and a mistake on this point leads often to a sad waste of time, even where it does not cause a mischievous perversion of ideas. Education may be defined to be the process of developing in due order and proportion all the good and desirable parts of human nature. On this point all educators are substantially agreed.

Another truth, to which there is a general theoretical assent, is that, in the order in which we develop the faculties, we should follow the leadings of nature, cultivating in childhood those faculties which seem most naturally to flourish in childish years, and reserving for maturer years the cultivation of those faculties which in the order of nature do not show much vigor until near the age of manhood, and which require for their full development a general ripening of all the other powers. The development of a human being is in some respects like that of a plant. There is one stage of growth suitable for the appearance and maturity of the leaf, another for the flower, a third for the fruit, and still a fourth for the perfected and ripened seed.

The analogy has of course many limitations. In the human plant, for instance, one class of faculties, after maturing, does not disappear in order to make place for another class, as the flower disappears before there can be fruit. Nor, again, is any class of faculties wanting altogether until the season for their development and maturity. The faculties all exist together, leaf, flower, fruit, and seed, at the same time, but each has its own best time for ripening.

While these principles have received the general assent of educators, there has been a wide divergence among them as to some of the practical applications. Which faculties do most naturally ripen early in life, and which late in life?

According to my own observation, the latest of the human powers in maturing, as it is the most consummate, is the Judgment. Next in the order of maturity, and next also in majesty and excellence, is the Reasoning power. Reason is minister to the judgment, furnishing to the latter materials for its action, as all the other powers, memory, fancy, imagination, and so forth, are ministers to reason, and supply it with its materials. The reasoning power lacks true vigor and muscle, the judgment is little to be relied on, until we approach manhood. Nature withholds from these faculties an earlier development, for the very reason, apparently, that they can ordinarily have but scanty materials for action until after the efflorescence of the other faculties. The mind must first be well filled with knowledge, which the other faculties have gathered and stored, before reason and judgment can have full scope for action.

Going to the other end of the scale, I have as little doubt that the earliest of all the faculties to bud and blossom, is the Memory. Children not only commit to memory with ease, but they take actual pleasure in it. Tasks, under which the grown up man recoils and reels, the child will assume with light heart, and execute without fatigue. Committing to memory, which is repulsive drudgery to the man, is the easiest of all tasks to the child. More than this. The things fixed in the memory of childhood are seldom forgotten. Things learned later in life, not only are learned with greater difficulty, but more rapidly disappear. I recall instantly and without effort, texts of Scripture, hymns, catechisms, rules of grammar and arithmetic, and scraps of poetry and of classic authors,

with which I became familiar when a boy. But it is a labor of Hercules for me to repeat by memory anything acquired since attaining the age of manhood. The Creator seems to have arranged an order in the natural development of the faculties for this very purpose, that in childhood and youth we may be chiefly occupied with the accumulation of materials in our intellectual storehouse. Now to reverse this process, to occupy the immature mind of childhood chiefly with the cultivation of faculties which are of later growth, and actually to put shackles and restraints upon the memory, nicknaming and ridiculing all memoriter exercises as parrot performances, is to ignore one of the primary facts of human nature. It is to be wiser than God.

Another faculty that shoots up into full growth in the very morning and spring-time of life, is Faith. I speak here, of course, not of religious faith, but of the faculty of the human mind which leads a child to believe instinctively whatever is told him. That we all do thus believe, until by slow and painful experience we learn to do otherwise, needs no demonstration. Everybody's experience attests the fact. It is equally plain that the existence and maturity of this faculty in early childhood is a most wise and beneficent provision of nature. How slow and tedious would be the first steps in knowledge, were the child born, as some teachers seem trying to make him, a sceptic, that is, with a mind which refuses to receive anything as true, except what it has first proved by experience and reason! On the contrary, how much is the acquisition of knowledge expedited, during these years of helplessness and dependency, by this spontaneous, instinctive faith of childhood. The same infinite wisdom and love, which in the order of nature provide for the helpless infant a father and mother to care for it, provide also in the constitution of the infant's mind that instinctive principle or power of faith, which alone makes the father's and mother's love efficacious towards its intellectual growth and development. Of what use were parents or teachers, in instructing a child which required proof for every statement that father, mother, or teacher gives? How cruel to force the confiding, young heart into premature scepticism, by compelling him to hunt up reasons for everything, when he has reasons, to him all-sufficient, in the fact that father, mother or teacher, told him so?

It may seem trifling to dwell so long upon these elementary points. Yet there are wide-spread plans of education which violate every principle here laid down. Educators and systems of education, enjoying the highest popularity, seem to have adopted the theory, at least they tacitly act upon the theory, that the first faculty of the mind to be developed is the reasoning power. Indeed, they are not far from asserting that the whole business of education consists in the cultivation of this power, and they bend accordingly their main energies upon training young children to go through certain processes of reasoning, so called. They require a child to prove everything before receiving it as true, to reason out a rule for himself for every process in arithmetic or grammar, to demonstrate

the multiplication table before daring to use it, or to commit it to memory if indeed they do not forbid entirely its being committed to memory as too parrot-like and mechanical. To commit blindly to memory precious forms of truth, which the wise and good have hived for the use of the race, is poohed at as old fogyish. To receive as true anything which the child cannot fathom, and which he has not discovered or demonstrated for himself, is denounced as slavish. All authority in teaching, growing out of the age and the reputed wisdom of the teacher, all faith and reverence in the learner, growing out of a sense of his ignorance and dependence, are discarded, and the frightened stripling is continually rapped on the knuckles, if he does not at every step show the truth of his allegations by what is called a course of reasoning. Children reason, of course. They should be encouraged and taught to reason. No teacher, who is wise, will neglect this part of a child's intellectual powers. But he will not consider this the season for its main, normal development. He will hold this subject for the present subordinate to many others. Moreover, the methods of reasoning, which he does adopt, will be of a peculiar kind, suited to the nature of childhood, the results being mainly intuitional, rather than the fruits of formal logic. To oblige a young child to go through a formal syllogistic statement in every step in elementary arithmetic, for instance, is simply absurd. It makes nothing plain to a child's mind which was not plain before. On the contrary, it often makes a muddle of what had been perfectly clear. What was in the clear sunlight of intuition, is now in a haze, through the intervening medium of logical terms and forms, through which he is obliged to look at it.

A primary teacher asks her class this question: "If I can buy 6 marbles with one penny, how many marbles can I buy with 5 pennies?" A bright boy who should promptly answer "30" would be sharply rebuked. Little eight-year old Solon on the next bench, has been better trained than that. With stately and solemn enunciation he delivers himself of a performance somewhat of this sort. "If I can buy 6 marbles with 1 penny, how many marbles can I buy with 5 pennies? Answer—I can buy 5 times as many marbles with 5 pennies as I can buy with 1 penny. If, therefore, I can buy 6 marbles with 1 penny, I can buy 5 times as many marbles with 5 pennies; and 5 times 6 marbles are 30 marbles. Therefore, if I can buy 6 marbles with one penny, I can buy 30 marbles with 5 pennies."

And this is termed reasoning! And to train children, by forced and artificial processes, to go through such a rigmarole of words, is recommended as a means of cultivating their reasoning power and of improving their power of expression! It is not pretended that children by such a process become more expert in reckoning. On the contrary, their movements as ready reckoners are retarded by it. Instead of learning to jump at once to the conclusion, lightning-like, by a sort of intuitional process, which is the very essence of an expert accountant, they learn laboriously to stay their march by a cumbersome and confusing circum-

location of words. And the expenditure of time and toil needed to acquire these formulas of expression, which nine times out of ten are to those young minds the mere *dicta magistri*, is justified on the ground that the children, if not learning arithmetic, are learning to reason.

Let me not be misunderstood. I do not advocate the disuse of explanations. Let teachers explain, let children give explanations. Let the rationale of the various processes through which the child goes, receive a certain amount of attention. But the extreme into which some are now going, in primary education, is that of giving too much time to explanation and to theory, and too little to practice. We reverse, too, the order of nature in this matter. What it now takes weeks and months to make clear to the immature understanding, is apprehended at a later day with ease and delight at the very first statement. There is a clear and consistent philosophy underlying this whole matter. It is simply this. In the healthy and natural order of development in educating a young mind, theory should follow practice, not precede it. Children learn the practice of arithmetic very young. They take to it naturally, and learn it easily, and become very rapidly expert practical accountants. But the science of arithmetic is quite another matter, and should not be forced upon them until a much later stage in their advancement.

To have a really correct apprehension of the principle of decimal notation, for instance, to understand that it is purely arbitrary, and that we might in the same way take any other number than ten as the base of a numerical scale,—that we might increase for instance by fives, or eights, or nines, or twelves, just as well as by tens,—all this requires considerable maturity of intellect, and some subtlety of reasoning. Indeed I doubt whether many of the pretentious sciolists, who insist so much on young children giving the rationale of everything, have themselves ever yet made an ultimate analysis of the first step in arithmetical notation. Many of them would open their eyes were you to tell them, for instance, that the number of fingers on your two hands may be just as correctly expressed by the figures 11, 12, 13, 14, or 15, as by the figures ten,—a truism perfectly familiar to every one acquainted with the generalizations of higher arithmetic. Yet it is up-hill work to make the matter quite clear to a beginner. We may wisely therefore give our children at first an arbitrary rule for notation. We give them an equally arbitrary rule for addition. They accept these rules and work upon them, and learn thereby the practical operations of arithmetic. The theory will follow in due time. When perfectly familiar with the practice and the forms of arithmetic, and sufficiently mature in intellect, they awaken gradually and surely, and almost without an effort, to the beautiful logic which underlies the science.

How do we learn language in childhood? Is it not solely on authority and by example? A child who lives in a family where no language is used but that which is logically and grammatically correct, will learn to

speak with logical and grammatical correctness long before it is able to give any account of the processes of its own mind in the matter, or indeed to understand those processes when explained by others. In other words, practice in language precedes theory. It should do so in other things. The parent who should take measures to prevent a child from speaking its mother tongue, except just so far and so fast as it could understand and explain the subtle logic which underlies all language, would be quite as wise as the teacher who refuses to let a child become expert in practical reckoning, until it can understand and explain at every step the rationale of the process,—who will not suffer a child to learn the multiplication table until it has mastered the metaphysics of the science of numbers, and can explain with the formalities of syllogism exactly how and why seven times nine make sixty-three.

These illustrations have carried me a little, perhaps, from my subject. But it seemed necessary to show that I am not beating the air. I have feared lest, in our very best schools, in the rebound from the exploded errors of the old system, we have unconsciously run into an error in the opposite extreme.

My position on the particular point now under consideration, may be summed up briefly, as follows: 1. In developing the faculties, we should follow the order of nature. 2. The faculties of memory and faith should be largely exercised and cultivated in childhood. 3. While the judgment and the reasoning faculty should be exercised during every stage of the intellectual development, the appropriate season for their main development and culture is near the close, rather than near the beginning, of an educational course. 4. The methods of reasoning used with children should be of a simple kind, dealing largely in direct intuitions, rather than formal and syllogistic. 5. It is a mistake to spend a large amount of time and effort in requiring young children formally to explain the rationale of their intellectual processes, and especially in requiring them to give such explanations before they have become by practice thoroughly familiar with the processes themselves.

I have thus endeavored to set forth, in the first place, what a Normal School is, namely, a seminary for professional training in the art and science of teaching; and, secondly, to show, with some particularity and variety of illustration, what teaching is, in its very root and essence; and to make the matter plainer, I have attempted to show the difference between teaching and training, and to explain some two or three out of very many different modes of teaching, and to discuss briefly one of the many points that are involved in the philosophy of education. Some distinct consideration of these subjects, which come up continually for discussion in a Normal School, seemed to be the very best line of argument for showing the necessity of such an institution. To appreciate the full force of this argument, it would be necessary, indeed, to consider the vast array of similar and connected subjects which beset the teacher's path, and

which there is not time now even to enumerate. Let me merely name some few of these subjects.

- The Monitorial method of teaching.

- The Catechetical method.

- The Explanatory method.

- The Synthetical method.

- The Analytical method.

Modes of securing in a large school all the while something for all the children to do.

Modes of teaching particular branches: as Spelling, Reading, Mental Arithmetic, Written Arithmetic, Grammar, Geography, Composition, Drawing, Penmanship, Vocal Music, &c.

- School apparatus and means for visible illustration.

The development and cultivation of the faculties of observation, attention, memory, association, conception, imagination, &c.

Modes of inspiring scholars with enthusiasm in study, and of cultivating habits of self-reliance.

Topics and times for introducing oral instruction.

Teaching with and without books.

Object teaching.

The formation of museums, and collections of plants, minerals, &c.

Exchange of specimens of penmanship, maps, drawings, minerals, &c., with other schools.

School examinations. Their object, and the different modes of conducting them.

School celebrations, festivals, and excursions.

The daily preparation which a teacher should make for school.

Circumstances which make a teacher happy in his work.

Requisites for success in teaching.

Causes of failure in teaching.

Course to be pursued in organizing a new school.

Course to be pursued in admitting new scholars.

Making an order of exercises.

Making a code of rules.

Keeping registers of attendance and progress.

Duties of the teacher to the parents and to school directors.

Opening and closing exercises of a school.

Moral and religious instruction and influences.

Modes of cultivating among children a love of truth, honesty, benevolence, and other virtues.

Modes of preventing lying, swearing, stealing, and other vices.

Modes of securing cleanliness of person, neatness of dress, courtesy of language, and gentleness of manners.

Modes of preserving the school-house and appurtenances from defacement.

Keeping the school-room in proper condition as to temperature and ventilation.

Length of school day.

Length and frequency of recess.

Games to be encouraged or discouraged at recess.

Modes of preventing tardiness.

Causes by which the health of children at school is promoted or injured.

Modes of establishing the teacher's authority.

Modes of securing the scholar's affections.

Mode of treating refractory children.

Modes of bringing forward dull, backward children.

Modes of preventing whispering.

The use of emulation.

Prizes and rewards.

But I pause. The very enumeration of such a list, it seems to me,

shows of itself, with overwhelming force, how urgent is the necessity that the teacher should have a time and an institution for considering them, and for obtaining in regard to them definite, well settled views. Some of these questions come up for practical decision every day of a teacher's life, and they are of too serious import to be left to the unpremeditated exigencies of the moment of execution. In a Normal School the novice hears these subjects discussed by teachers and professors of learning and experience, and he is made acquainted with the general usage of the most successful members of the profession. He enters upon his important and responsible work, not only fortified with safeguards against mistake, but furnished with a kind of knowledge which reduces to a minimum his chances of failure, and increases to almost a certainty his chances of success.

AMERICAN ETHNOLOGY.

A PAPER ON A GENERAL SOCIETY FOR THE STUDY OF AMERICAN ANTIQUITIES.

Written in November, 1866, and communicated to the U. S. Commissioner of Education, by Dr. George A. Matile, late Professor of Law in Neuchâtel, Switzerland, in April, 1867.

THE love for historical traditions brought to this country by its colonists, has been continually fostered up to our days. One of the first occupations of those settlers, was to put in writings the abridged history of their ancestors, leaving to their children, the care of transmitting it to their posterity. By doing so, they obeyed a law traced by God's finger in the human heart. Man does not like wholly to die: he finds pleasure in erecting to himself, whilst living, a monument in the memory of his successors, who, in their turn are anxious to seek their own history in that of their predecessors, and to compare their creeds with theirs, their tastes with their habits, their hopes with their destinies.

The study of history is every way grand: its usefulness is demonstrated by this truth, that both peoples and individuals who care little about their ancestors, are very near being in their turn forgotten by their descendants.

After our first settlers had perpetuated by written annals the memory of their predecessors, their successors devoted themselves to the study of the colonial period; and now they are working in a much wider field, not limiting themselves to the history of their own race alone in the new and the old world, but making frequent excursions into the domain of others, and of classical antiquity.

A very extensive literature shows to what degree the taste for historical studies is now prevalent with us, and how much more has been done in those branches, both by individual labor and spirit of association. Again, there is with us no State, which has not its historical society. Many a county and town even has one of its own.

At the beginning, history was limited to monographs; its objects were individuals, families, groups of families; then came the towns, the counties, the colonies and the States; this being a consequence of the natural course of things, which leads us first to proceed from

Institution has done and is still doing for the benefit of archeological science.

It becomes more and more urgent to promote the idea of carefully collecting our antiquities; of putting them together, and bringing them within the reach of the community. Let us apply ourselves to show the people the value of such collections, that they may take an interest in them and contribute to their development.

It is not only to history that archeology and ethnology render useful services; they are also a powerful auxiliary to the study of certain branches of the natural sciences. The lacustrian antiquities discovered over 30 years since in Switzerland, have given a new interest to the objects of art left by the Indians. Both kinds of antiquities carefully collected in the Museums of the new and the old world, will allow the investigators to compare the analogous periods of the intellectual development of the primitive inhabitants of both continents. It would undoubtedly be one of the greatest triumphs of geology, which teaches us the relative age of the fossil plants and animals, to assist us in critically determining the chronology of the human races which have succeeded each other. Let only the geologists prove that the bones, pottery, utensils, &c., they have found in some beds, are cotemporary with the latter, and were not introduced therein long after, under the influence of some cause, perhaps yet entirely unknown. Be it as it may, the lacustrian antiquities of Switzerland have led to the idea, that where historical documents are wanting, the assistance of naturalists may be called for. This explains the presence in geological Museums of archeological objects found in the beds above referred to.

We have societies which devote themselves exclusively to archeology. Science is greatly indebted to them; but few as they are, and with but limited means, they are unable to achieve what they would do in other circumstances. What I have said of monographs, applies to them; they are the necessary foundations to a larger edifice yet to come, for we need a general American Archeologico-Ethnological Society, embracing the whole continent; the special object of which would be the study of the aborigines through their relics, and their eventual relations with the Indians.

Such an association would extend over a ground, which it is not in the power of private societies to cover. It would be endowed with means sufficient to accomplish its grand object; for, in our country, pecuniary aid is not long wanting after the people have become satisfied that it will be applied in an intelligent manner to a useful and

national purpose. Nor would it lack in men; for many have given evidence by their zeal, their science and continuous labors, of their ability to become the architects and sustainers of the edifice I propose to erect.

One of the first duties of such a general society would be to promote associations of the same character in all the States. A State Society would in its turn endeavor to find out in every county an intelligent and active correspondent, whose special mission would be to inform the State Society of all discoveries made on or in the soil: to furnish in its behalf a list of all the curiosities worthy of notice possessed either by private individuals or public institutions, and to send a copy or at least the title of all the works, pamphlets, papers, &c., published within the limits of the county. Once a year, the State Society would publish its proceedings, and an abstract, if not the whole, of the papers received from its correspondents.

A frequent intercourse of those State Societies with the general society, would enable the latter to publish every year a condensed annual of all researches and discoveries made in the domain of antiquity. How much benefit archeologists would derive from such frequent communications between those societies and others of the same kind; how much their work would be facilitated, their publications rendered more complete and useful, it is easy to comprehend.

Centralization is an evil when it goes so far as to impair the parts of the body, be it political or scientific. It is beneficial on the contrary, when instead of atrophying them, it imparts to them life and brings them in closer connection with each other.

A general society, as I understand it, would encourage private investigations, combine individual and collective action and remove any idea of monopolizing the labors of others engaged in the field of science.

Here I can speak from my own experience in Switzerland, my former country. Cantonal or State historical Societies had existed there for over a century, when it was found necessary to introduce into the structure, an element which was to better brace the different parts thereof, and thus to complete and consolidate the whole edifice; and a general historical society was accordingly created, among the founders of which it was my privilege to be. That institution has never impeded the course of its sister societies, which not only have continued to enjoy their full liberty of action and have prospered, but also have increased in numbers.

Archeology should be made popular through all the means within

the reach of societies, such as publications and lectures. Printed instructions, given by a common understanding, should show the people the importance of archeology, the mode of searching and surveying the soil, of keeping, collecting, reproducing and packing up the objects found. Well ordained exhibitions of the latter, would greatly contribute to that end, and lead people to present such curiosities, which are kept in families where, isolated as they are, they have but little value; whilst being a part of a collection, they would gain in importance and increase that of the specimens by the side of which they would find a proper place.

Casts from originals not being at all times easy to make, photography has been often resorted to for the reproduction of specimen types found with us. By these means and others, the comparison between the mental development of the primitive inhabitants of Europe and of this country at analogous periods, has been facilitated. We see from the *Smithsonian Reports* that the Institution of that name, desiring to add to its collections all the materials that might throw any light on the physical type, the arts and manufactures of the primitive inhabitants of this country, has requested the assistance of the officers of the army and navy, the missionaries, the superintendents of the Indian Departments, the agents residing among the Indians, and travellers in general, to make for that purpose an extensive use of photography.

But, great as are the services rendered by this art, its impressions lack many of the advantages furnished by casts, which reproduce the *fac-simile* of the originals on their form, size, and color. Therefore, while fully approving the use of photography in many instances, I would quite earnestly recommend the moulding of original specimens or even copies, in plaster of Paris, cement or other like material, whenever it is feasible.

Casts therefrom will always be preferable to pictures however good they may be, and are far more appropriate to Museums than reproductions on paper which require to be put in frames or portfolios.

Scientific societies can not dispense with such repositories of curiosities or works of art, which are necessary tools in the hands of investigators. Museums are the collectors, safe-keepers, and preservers of these productions; more than that, they multiply them and thus enable themselves to make exchanges and to considerably increase their own collections. Most museums in Europe have a moulder for that purpose.

Such Museums erected with us, in every State at least, would awaken an interest among the people who would gladly contribute in some way or other to their growth. Any delay in the reproduction of originals is detrimental to science. How many have been destroyed which might have been preserved, how many have gone abroad to be placed there in public collections, while they ought to adorn our Museums. Let us take casts as promptly as possible of what we have preserved, and let us take enough to enrich through exchanges from abroad our collections, and try to get copies of the originals we have lost.

One of the first duties of the general society I have in view, would be to open a correspondence with all the Directors of Museums in Europe, in order to ascertain what they possess which may throw light upon the antiquities of our soil, and to propose to them to make with us an exchange of their duplicates or casts. Such an appeal would be eagerly responded to from all quarters of the Old World. There is no serious difficulty in obtaining such a result.

Let a general society or an association of a few lovers of archeology take the matter in hand and open a moulding shop, and they will soon see what great benefits they will derive from their exchanges.

I speak of these things from my own long and practical experience acquired in Museums both in Europe and America. As I was conversing on the subject four years ago with the Secretary of the Smithsonian Institution, he at once saw the importance of the matter, and a few days after, I was at work moulding Indian antiquities owned by the Institution and many others entrusted to it by the Philosophical Society of Philadelphia and private persons. The exchange of my casts with Museums and savants, both in the United States and abroad, had just begun, when a fire consumed in January, 1866, a portion of the building, and destroyed a part of its collections, which put an end to exchanges and to my casts. The latter represented men and women in various attitudes, idols, monsters, animals fantastic and real, architectural ornaments, tools, bas-reliefs, flowers, skulls, &c. The large inscription of Palenque, the original of which is in the Institution, and which I discovered to be the second part of the tablet given by John L. Stevens' *Incidents of Travels in Central America, Chiapas and Yucatan*, Vol. I, p. 344-345, Casa No. 2, and page 346, l. 3-8, was among my casts.

Another chief duty of a general archeological society, would be to prepare and issue a catalogue of American archeology, indicating the place and date of the publication of works relating to the sub-

ject. This catalogue should embrace not only books and special pamphlets, but everything that would throw light on the matter, such as short notices and information which are now and then found in daily papers. The collection of these minute materials would especially be the object of local correspondents, who would report their respective State Societies. The final communication of those papers to the general society, would allow the latter to form a full and most useful catalogue. Catalogues of this description have been published for various branches of science. We have a *Bibliotheca juridica*, a *Nomenclator zoologicus*, &c., why should not we have a *Bibliotheca archeologica Americana*? and give thereby our archeological societies the means of completing their libraries which to them are as indispensable as Museums.

I have exhibited some of our desideratums for the promotion of archeological science among us, and the mode of collecting and multiplying our materials; I have pointed out the necessity of bringing to life a General Archeological Society through which only all these ends can be attained.

Why should not a Congress of American Archeologists be convened to consider this subject? Who will take the matter at heart and in hand?

•
GEO. A. MATILE.

WASHINGTON.



1861

THE
American Journal of Education.

[NATIONAL SERIES,]

THE American Journal of Education.

[NATIONAL SERIES,]
No. 3.—APRIL, 1868.

CONTENTS.

	PAGE.
Portrait of the Rev. Egerton Ryerson, D. D., LL. D.,	433
✓ I. SECONDARY INSTRUCTION IN PRUSSIA,	433
1. HISTORICAL DEVELOPMENT—SCHOOL ADMINISTRATION,	435
a. State or Central Authority,	435
Decree of 1552, 1573, 1663, 1667,	435
Establishment of Third Section in Ministry of Interior, 1806,	440
Humboldt, Nicolovius, Suvern,	440
Special Minister of Education and Worship,	441
Baron von Altenstein, Eichhorn, Von Raumer,	441
b. Provincial Authorities,	447
1. Province of Prussia,	449
2. Province of Posen,	449
3. Silesia,	451
4. Pomerania,	452
5. Saxony,	453
6. Westphalia,	454
7. Rhine and Hohenzollern,	455
8. Brandenburg,	459
c. Municipal Authorities,	460
d. Miscellaneous,	462
2. TEACHERS—their qualifications and appointment,	463
Director—Object, import and official position,	466
Conferences of Directors,	468
Class-system and Professors,	469
Title, hours of work, leave of absence,	470
3. REGULATIONS FOR EXAMINATION,	474
Examen pro facultate—Examen pro loco,	476
Trial Lessons,	478
Degrees of Proficiency,	479
Conditional facultate docendi,	481
Examination for teaching Drawing, Gymnastics, Surveying,	483
4. PREPARATION OF TEACHERS FOR SUPERIOR SCHOOLS,	484
Philological Seminaries,	484
Pedagogic Seminaries,	487
Pedagogic Trial Year,	489
Travel to visit Foreign Schools,	492
5. STUDY PLANS,	492
Degrees of Instruction—1810, 1812, 1816, 1831, 1837,	493
Latin, Greek, Mathematics, 1856,	496
Mental Philosophy, Religion, Gymnastics, Stenography,	498
6. REAL-SCHOOLS AND HIGHER BURGHER-SCHOOLS,	501
Progressive Development,	501
Plan of Study in 1850,	502
7. GENERAL MATTERS,	503
Establishment of New Institutions, School Year,	503
Size of Classes, Vacations, School Programme,	504
Books of References, Discipline, Order of rank,	505
Privileges of Graduates,	506
8. CLASSIFICATION OF INSTITUTIONS BY DATE OF ESTABLISHMENT,	508
9. ARRANGEMENT OF INSTITUTIONS BY PROVINCES,	515

	PAGE.
✓ II. PUBLIC INSTRUCTION IN DUCHY OF OLDENBURG.....	519
History and Population,	519
1. Elementary or Primary Schools,	519
2. Secondary Schools,	522
3. Professional Schools,	523
✓ III. SWITZERLAND.....	525
Territory, Population, Public Instruction,	525
✓ IV. PUBLIC INSTRUCTION IN CANTON OF ZURICH,	527
School Code of 1839,	527
✓ V. SCHOOLS AS THEY WERE SIXTY YEARS AGO IN THE UNITED STATES,	555
Reminiscences of Schools and Teachers, by Samuel Seton,	555
Master Miles' School in Stonington Borough, Conn.,	567
✓ VI. ACADEMIC EDUCATION IN THE UNITED STATES,	561
Circular asking for Information,	561
MONSON ACADEMY,	563
List of Principals,	563
Instructors in the English Department,	564
Female Teachers,	565
List of Trustees,	565
Benefactors and Endowments,	567
Departments of Instruction,	568
Studies in 1867,	569
Boarding, Religious Education, Discipline,	571
Societies, Tuition,	572
Massachusetts System of Academies,	573
Report and Act of 1797,	574
✓ VII. EDUCATIONAL BIOGRAPHY,	577
EGERTON RYERSON, Chief Superintendent of Education in Upper Canada,	577
Memoir,	577
Summary of Educational Progress in Upper Canada from 1834 to 1863,	592
✓ VIII. GERMAN UNIVERSITIES,	595
Compared with English and French,	595
Peculiar features of the German,	597
Necessity of Prolonged Residence,	602
Domestic life of Students,	604
Note. Endowments of Oxford University,	603

THE AMERICAN JOURNAL OF EDUCATION, *National Series*, Volume I., for 1867-8, edited by Henry Barnard, LL.D., U. S. Commissioner of Education, is issued quarterly at \$4.00 per annum, (in four numbers,) by D. N. CAMP, *Publisher*, Hartford, Conn.

PUBLIC INSTRUCTION IN PRUSSIA.

II. SECONDARY SCHOOLS.

A. HISTORICAL DEVELOPMENT OF SCHOOL ADMINISTRATION.

a. *Supreme Administration.*

THE various independent constituent parts of Prussia from which the kingdom has its origin, prevented an early central administration of public instruction, which was not established till the present century. The schools generally, according to their origin, were at first closely connected with the Church and its regulations, or dependent on the local authorities. The Elector Joachim II. organized in 1552 a consistory for evangelical church and school affairs in Brandenburg; John George decreed in 1573 a visiting and consistorial regulation, which determined the supervision of the schools, as well as their internal arrangements, the instruction and the relations of the teachers. Clergymen were made inspectors, and at the head was the consistory, composed of four or five members, whose assessor was usually the general superintendent. This council undertook the traveling inspection in the provinces, which was fixed at every ten years for each province; during which period the clergymen were exempt from school and church visiting duties. The regulation specified as visitors: "Our general *Superintendents* and one of our Consistory members, or from some other council, together with the *Notarius*" (clerk.) The visitors appointed as inspectors for the surrounding towns and villages, the pastors of the principal cities of each place. In regard to the instruction of teachers and pupils of the city-schools, which developed afterwards into high-schools, very special regulations were made. At the time of the institution of a privy counselorship, under the Elector Joachim Frederic, as the highest established administrative council, there originated with it, for the consistory, an additional clerical department. The Thirty Years' War, from whose devastating consequences the Brandenburgian countries suffered particularly, prevented for a long time any further progress in School administration. As a proof of this, we have the decree of Elector Frederick William concerning the affairs of the Protestant Church, in 1662, which contains also the beginning of a School regulation, namely, "that churches and communities should unite their efforts in organizing here and there, in villages, towns and cities, well-administered schools." The Lutheran Church regulations for the Duchy of Cleves and the earldom of Mark, in 1687, recommend the same, although with more detailed specifications.

The union of the Duchy of Prussia with the Brandenburgian provinces, the erection of Prussia into a kingdom under Frederic III., rendered centralization in the administration possible, and thus in fact developed the general legislation of the Prussian State since the eighteenth century. Entering deeper into the question, and aiming at a still greater centralization of instruction, was the royal decree of Frederick William I., October 24, 1713, concerning the Prussian evangelical, inspective, presbyterial, parochial regulations for gymnasiums and schools. It gives the supervision of all the schools to the Church: "the gymnasiums and Latin schools of Berlin, Frankfort on the Oder, and Halle, to continue in their present organization and *typis lectionum*, and those of the other cities and provinces to be modeled as much as possible upon the former, so that some uniformity might be obtained." The decidedly Protestant character of this regulation shows itself in the importance it gives to the Heidelberg catechism: "No other catechism for the young to be allowed in schools or churches." The exclusive use of this catechism was again prescribed in 1716. Important for higher instruction was the revised regulation of September 30, 1718, both for students in schools and universities, as also for the *Canditorum ministerii*, in which the moral and scientific requirements of those devoting themselves to university studies, namely, the theologians, are strongly set forth and enforced.

In December 22d, 1722, Frederic William I. issued instructions for the general treasury, war and domain departments, which contained also an article relative to church and school affairs: "In all places," says the article, "where the *jus patronatus* belongs to us, the churches and schools shall be kept in good condition, and the administration shall direct the authorities of the provinces to see to this matter." The mere æsthetic development of the mind found no sympathy with this king: he cared chiefly for the wants of the common people. The administration of this department was given to Printzen, president of the German and French members of the consistory, director of all ecclesiastical affairs, protector of the academy of fine arts, principal trustee of all the royal universities, etc., who held it from 1722 to 1725. He was succeeded by the Baron of In-and-Knyphausen, to whom, in consequence of an accumulation of work in the consistorial affairs, (1730) was associated as vice-president, Von Reichenbach. In the four provincial departments, the church and school affairs were administered by members of the consistory and the legislature.

It is natural that under a monarch like Frederick II., the school administration should be more intelligently conceived than under his predecessor, so far his inferior in real culture. As soon as the storms of war were over, he issued a decree, (1750,) for the Lutheran high consistory of Berlin, to whom was intrusted the supervision of the consistories of the provinces, with the exception of those of Schleswig. Its first president was the chief of the ecclesiastical department, the privy State and law minister, Baron of Danckelmann in 1764, the church and school

affairs of the Protestants were intrusted to a special chief. But it was only after the close of the Seven Years' War that the great king could give his special attention and care to what he considered the hobby of his old age, schools and public instruction. For the carrying out of his views of education and mental culture, he chose Baron von Zedlitz-Leipe, who, as minister of the State and Law department, was made ex-officio chief of the ecclesiastical department for the Protestant church and school affairs, (January 18, 1771.) The king's letter of 1769 *sur l'éducation*, (Euvres ix., p. 118,) contains the principles by which public instruction was to be guided, and has been guided since. He regretted that in the gymnasiums the pupils were not accustomed to think for themselves and did not begin early to exercise their own judgment. In the public offices, birth had no advantage over merit. "I am persuaded," he says, "that man can be made what you wish him to be. All that enlightens the mind, all that widens the circle of knowledge, elevates the soul, and never lowers it." The exercise of one's judgment, the cultivation of the understanding, thinking for one's self, were considered the soul of instruction, and Zedlitz was the man to make these principles the fundamental springs of his activity, in opposition to the blind memorizing of matters never understood, to the reciting of mere words, and to the mental inactivity of both pupils and teachers. He succeeded in carrying out his purposes, to find the right sort of men in Meierotto, Niemeyer, Gedike; he called the philologist Fr. Aug. Wolf to Halle, and the development of the Prussian high-school system is still linked with the activity of these men. It was at the time when Zedlitz was at the head of the Educational administration, that that great movement of the Pedagogy took place, a revolution which originated with Basedow, who harmonized thoroughly with the fundamental ideas underlying Zedlitz's views. It was also to carry these out that Trapp was called from his Philanthropinum in Dessau, to take the chair of Professor of Pedagogics at Halle. But Zedlitz recognized soon the emptiness of this scheme of mere pedagogics, and in announcing to the king (1782) the return of Trapp to Holstein, declared the vacant chair to be "no very great loss."

Considering the self-dependent development of the school-system, Zedlitz conceived the plan of organizing a supreme school-board, independent of the superior councils, which, beside the consistory, should have the supervision of the whole school administration in all the royal domains. This plan was carried out by Frederick William II. in 1787. The board was to depend immediately on the king, and have charge of all the affairs which had till then been conducted by the chief trustees of the universities. It became the duty of all State collegiums, magistrates and public officers, to execute the orders of the chief school-board as rapidly as possible. At the head of this new board stood Von Zedlitz, and Wöllner, presidents of the privy council of the department of finances; and as members, the chaplain of the University of Halle, Von Hofmann, the consistorial counselor, Professor Steinbart, of Frankfort on the Oder, and

the gymnasium directors, Gedike and Meierotto, of Berlin, who were also commissioned to make the inspection visits through the provinces. The most important decree of this council, and the most fruitful in results, was the plan of instruction conceived by Gedike, under the coöperation of Meierotto, given December 23, 1788, and stating among other regulations that the final university examination of the school was to take place before the dismissal of the scholars.

A short time previous to this, however, a counter-movement had taken place in school and church affairs, by the withdrawal of the minister Zedlitz, and the subsequent election of the privy counselor, Wöllner, to the actual privy State and Law ministry, and as chief of the ecclesiastical department, (July 3, 1788,) which election found forthwith an expression in the religious edict of July 9, 1788. This edict was decidedly opposed to the so-called "rage of improvement, by which the respect for the Bible, as the revealed word of God, was calculated to grow weak, which falsified, distorted, and even rejected the divine records, concerning the welfare of the human race. A general rule of conduct was necessarily maintained, by which the masses could be led faithfully and honestly by their teachers in matters of faith, and this line of conduct had thus far been the Christian religion, as set forth by its three principal confessions." The edict of December 19, 1788, brought back into full force the censure on philosophical and theological writings, which in the last years of Frederic had lain dead, and men of a rationalistic cast of mind like Gedike lost their influence.

Niemeyer was threatened with suspension, and a circular addressed to all the inspectors of Kurmark stated, that to help towards the increase of neology, all newly-appointed teachers in the gymnasiums and city-schools should be made to sign a reciprocal agreement printed for that purpose, (1794.) On the 5th of February of the same year was published the general common law for the Prussian States, which, in part ii., tit. 12, declares schools and universities to be State institutions, and sets up a system of laws embracing the whole plan of instruction, of which the principal points are still in force.

Frederic William III., on his accession to the throne, November 16, 1797, sent on the 28d of the same month a cabinet order to the various departments, houses, and public authorities, cautioning them against the many unworthy subjects that had found means to get into office. Prompted by this message, Wöllner dispatched, December 5, 1797, a special order to the consistories, to remind all lower councils of their duties, and urge upon them a renewed vigilance in respect to the pastors and teachers under their special supervision, that these may not only teach religion in its purity and according to the prescription of the religious edict, but that they may also prove efficient and industrious in the discharge of their school and pastoral offices. Meanwhile, the counselor of the legation, Menken, who opposed the policy of Wöllner, had been appointed privy cabinet counselor to the king. The influence of this

gentleman upon the king determined Wöllner to issue, January 13, 1798, a circular in which he proposed to devise better means to advance the spirit of true religion and morality. But in spite of the readiness he showed to destroy his own work, he received a message disapproving his course, wherein the leading principle of government which actuated Frederic William III. is freely set forth: "I honor religion myself, and follow gladly its blissful precepts, and would not rule over a people that disregarded it. But I know also that it must come from the heart, from the feelings, from inner conviction; if degraded to a methodical restraint, if made a senseless babble, it will never promote virtue and honesty. Reason and philosophy must be its inseparable companions; only then will it exist of itself, and be able to maintain itself without the authority of those who would impose their dogmas upon future times, and prescribe to generations to come, how they should think and feel at all times and in all circumstances, on subjects that have the most important influence on their welfare." In spite of this reprimand, Wöllner continued in his own way of administration, and received in the early part of March his dismissal, as did the counselors of the chief consistory and the members of the chief school-college committee, who sympathized with him. There remained in the chief consistory, Andrew Jacob Hecker, who, like all those appointed after 1800—Zöllner, Nolte, Niemeyer, Sack, Ribbeck, Hanstein—were the right sort of men to carry out the cabinet order of January 11, 1798. Wöllner's place was filled by Von Massow, who was elected chief of the Lutheran and all ecclesiastical affairs, and the school department in general. The church affairs of the Roman Catholics were connected with the former, but the school affairs of the German Reformed Church came under a special department, of which Thulemeyer was chief. Both ministers were designated as ministers of State of the Judicial Department. The chief of the Lutheran party was also president of the chief consistory and chief school-board, of the directory of the poor in Berlin and Potsdam, of the privy high court, and of the court of credit system of the rural districts of East Prussia and Pomerania. The Lutheran school affairs of Silesia, conducted by the chief president of the Breslau bailiff administration, and the Roman Catholic, ecclesiastical and school affairs in Silesia, South Prussia, New East Prussia, and in the Frankish Principalities, that come within the administration of the province ministers, were outside his jurisdiction. In the latter, the Erlangen University came under the supervision of the minister Hardenberg. This dismemberment did not allow of constructing and pursuing a consistent plan for a satisfactory development of the mental and moral faculties of the people: the Prussian nation was composed of too many elements.

Soon followed a period of the severest trial and of the most spirited advancement. The words of the king, (August 10, 1807:) "The State must regain in mental force what it has lost in physical force," became henceforth the guiding star of the Prussian government. By the new

organization of the State councils, in 1808, the chief school-college was dissolved, and the administration of public instruction was attached to the Ministry of the Interior, under the name of "*Third Section, for Worship and Public Instruction*," and placed under the immediate direction of a privy State counselor and section chief. The king appointed as minister the count of Dohna, and as chief of the third section, William von Humboldt, who united in the rarest manner all the qualities of a statesman and a scholar, and who, free from all selfish motives, was best calculated to fulfill the high charge intrusted to him, viz., the regeneration of Prussia. An educational system was the regeneration the Prussian monarchy aimed at, but the limited financial means of the State set obstacles to the plans the great Humboldt had conceived, and the latter, discouraged by continual pecuniary impediments, resigned, June 28, 1810, the position he had entered upon December 17, 1808.

Nicolovius and Suvern had been elected with him as technical counselors, to take charge of the section of instruction. Nicolovius had previously been secular consistorial counselor, and member of the East Prussian consistories, then representative counselor in the university affairs at Königsberg, and finally member of the department of ecclesiastical affairs and those concerning the schools and the poor, and had in the latter time been in constant intercourse with the most distinguished men of the State. His fine and gentle appearance, the close intimacy in which he had stood for a long time with Goethe, Jacobi, and other superior and congenial minds, his firm faith in the progressive and magnificent development of our time, rendered him a worthy co-laborer of Humboldt. He remained through many changes in the clerical ministry until May 22, 1839. Suvern brought into his new position, beside his vast scientific acquirements, a great experience in the profession of teaching, which he had obtained in the discharge of the duties of two directorships, at Thorn and Elbing, and during his academical career at Königsberg. He drafted the most important regulations and instructions, which the reorganization of the higher school-system required; for example, the subject of the examination of the candidates for the higher school office, of July 12, 1810, the examination of abiturientes, of June 25, 1812, and an essay on general instruction, in 1816, of which all was not published, but whose leading principles dictated the regulations of the administration. He submitted to the consideration of the State's ministry, a general plan for the form of government of the school system in Prussia, according to the cabinet order of November 8, 1817, in which it was said, "that the success of all that the State aimed at by its constitution, legislation and administration, depended on the foundations laid in the minds of the young," but the diverging and conflicting opinions, on the time and mode of putting portions of the plan into effect, prevented its execution. Subsequent to 1818, he confined himself almost entirely to the reports of the Academy of Sciences and to the sphere of activity of the co-directors in the department of instruction; he died October 2, 1829.

Humboldt's place, at the head of the third section of public worship, was filled by the privy State counselor Von Schuckmann; and Nicolovius was appointed director for the specialities of the same; even when Schuckmann was elected Minister of the Interior, in 1814, the administration of public culture and instruction remained for some time within his jurisdiction. On the 3d of November, 1817, a cabinet order declared that "the Minister of the Interior should resign the office of culture and public instruction, as well as that of the department of medicine, connected with it," inasmuch as "the dignity and importance of the ecclesiastical and educational affairs demand a special minister," and Baron von Altenstein was selected for that office.

The energetic and effectual activity which, since 1814, the government displayed in the transformation and reconstruction of the higher institutions of learning, gained an intelligent and well-informed guide in Altenstein, and after him in Dr. Johannes Schulze, (1st August, 1818,) a new life-giving power, that made itself felt throughout the whole field of the sciences. About the same time, Hegel was appointed professor of philosophy in the University of Berlin, where, particularly favored by the educational system, he exercised a mighty influence upon the mental development of his cotemporaries, opening on all sides new avenues to science, and working out through a well-sustained method the taming curb that was to lead thought to the recognition of truth.

A glowing testimony of the organizing, regulating, and all-pervading spirit of the administration, is the large number of special and general amendments that appear in the higher school-system, which, during the Altenstein administration, (from 1817 till the death of the minister, May 14, 1840,) amounted, including those of the University concerning the last examination, June 4, 1834, to 738, all of which, special as well as general, contain much that is awakening and fertilizing to the mind, and in many instances, far outreach their immediate circle of action. That regulation formed an important clause in the reorganization system of the higher court. It was the result of years of experience, and of the mature consideration of circumstances. There would necessarily follow from it a better and greater unanimity in systems of instruction, and in the classifications of the various gymnasiums. In subsequent times, and till Altenstein's death, there were 438 more amendments made, among which the ministerial regulation of Oct. 24, 1837, is accounted the most important for its laying down the fundamental conditions by which gymnasial instruction was to be governed. It was the first time that a general Normal School system was devised for all gymnasiums. Its principles were adopted and followed until 1856.

The political changes, whose causes and reasons are sufficiently known, made in 1819 a painful break in the promising condition of the higher school instruction, and called forth the circular of the minister of Altenstein, which, addressed to the various presidents of educational institutions, ran as follows, in its introductory pages: "Recent events, and

especially the late reports in the 85th session of the German League, in Frankfort on the Main, concerning the abuses and the degeneracy which have been discovered in the German school and university affairs, oblige me to make an earnest appeal to all principals of schools and heads of gymnasiums and universities, to give particular and renewed attention to the abuses and errors which have been found in the school administration, and to exert all their power to oppose their influence, and prevent their further development." The object of the new measures was to inspire the young with an active love for their king and their country, and to enforce a severe discipline which, whilst its ruling motive was to treat the young with mildness and kindness, would also command obedience, industry and good morals, and make the strict observance of the existing laws their most sacred duty." A few years previous, the whole Prussian nation, and particularly the higher schools, had given to the world a glowing testimony of their love of king and country. The extraordinary events of that time, the great deeds, in which partly teachers and pupils participated, or which they encouraged by the vivid interest and the self-sacrificing spirit they manifested, could not help exercising a wonderful influence, and kindling a noble enthusiasm, that tended naturally to raise the intellect and sentiments of the younger generation, and leave, even in the subsequent years of peace, a lasting impression on their minds. We can not deny that war engendered among the school-going population a certain roughness, sturdiness and stubbornness, but the noble virtues of which they gave such ample proofs, and which filled their cotemporaries and posterity with admiration, should have protected them from suspicion, and from the severe measures that originated with the above-mentioned mandate. One of its most painful regulations was that which put the higher school direction under the supervision of the police, by limiting, on May 21, 1824, and without the knowledge of the ministry of Altenstein, the kind and benevolent Nicolovius to his clerical department, and appointing the director of the police ministry, Von Kamptz, in connection with his official duties, director of the educational department. In 1825, Von Kamptz was released from his duties in the Ministry of the Interior and Police administration, and appointed director of the Law department, but he preserved his position in the educational department until February 9, 1832. A cabinet order of the 4th of March of the same year, reinvested Nicolovius, to the great joy of Altenstein, with the direction of the educational department, which position he was still filling in the last weeks of the year 1880.

Although Von Kamptz had, by his friendly and polite manners, considerably tempered the feeling of fear and humility which had come over the educational world at his appointment as their chief, yet nothing could obliterate the painful impression which the mandate of the Ministry of the Interior and of the Police, addressed to the various administrations, made on the school-people, May 25, 1824, and which commences as follows:—"The irrefutable proofs we have that the rules and measures

recommended and prescribed till now, have not been able to suppress the injurious and erroneous sentiments, and false opinions still existing here and there amidst the higher and lower educational establishments, have determined his Majesty to issue still more positive commands on this subject." These commands concerned particularly the universities; and from that time the teacher became also subject to the strictest watchfulness of the government, the royal administrations being particularly requested to see that the younger public officers, whether in the service of the administration proper, or in that of any other public office, did not carry into their profession the injurious principles of the student life and its associations. During the following years there appeared, first, the cabinet order of August 16, 1826, in regard to the proceedings against faulty service and moral trespasses, in the question of pensions; second, that of September 24, 1827, in regard to the propriety of an inquest, in an administrative sense, into the case of civil officers who had come under judicial examination, but had not been dismissed from service; third, that of March 27, 1831, in regard to the application of the two preceding resolutions to teachers of high-schools and universities; fourth, that of June 20, 1838, in the form of a royal circular to all the school-boards of the provinces, concerning the political opinions of teachers and pupils, wherein the various administrations were again admonished to have an eye upon the teachers in this respect, and on the responsibility of the boards and their several members to report to the ministry all traces of antagonistic feelings and opinions.

The real consequences of such measures, called forth, in other countries, by ever recurring attempts at revolution, were not by any means as great as the anxiety that had dictated them. There was no occasion to apply them, and the administration of the educational bureau was too generous to spy out delinquencies of that kind. There existed also among the teachers of Prussian high-schools, the good, old Prussian principle, not to separate the love of country from the obedience due to the king, and the men who had actively lived through the troubles and the rise of Prussia, or had grown up under the burden of its misfortunes and had finally shared in its glory, offered to the educational administration, by their noble self-sacrifice, and their higher ideal of the profession of teacher, material for the culture of the people, such as few administrations had yet had at their command.

One of the most important changes in the administration was that decreed by the royal cabinet order, December 31, 1825, by which the school council (*collegium*) of the provinces were separated from the consistories; the first were clothed with their own independent supervision over the higher school-establishments; the second retained the right and duty to take part in the inspection of religious instruction. The higher private-schools came generally under the control of the government. Amongst the most important measures which originated principally under the influence of John Schulze, may be named that which laid aside the

parallel and section system, and introduced, in 1820, the general class system, appointing a regular professor for every class. Further are to be mentioned among the number of resolutions, the instruction for gymnasium directors, who, with the exception of those of the Rhine countries, (1839,) belong to the years 1823 to 1828; the ministerial resolution of September 24, 1826, respecting the pedagogic proof-year of the candidates for teaching, the regulation of April 20, 1831, for the examination of the candidates for higher teaching, wherein also the general school affairs are duly considered.

The harmony in which the regulations and promoting measures of the school-administration stood with the all-pervading enthusiasm of those who had made it their duty to carry them out, brought the school affairs, under the Altenstein administration, to such a flourishing condition, that their renown spread not only over the whole of Europe, but reached the furthestmost shores of the oceans, and attracted from all sides zealous disciples of the profession of teaching, and ambassadors from foreign governments, who came to examine for themselves in Prussia, what could and should be done for schools. The best testimony of this is *Cousin's* own words, in his Report entitled, "*Etat de l'instruction secondaire dans le royaume de Prusse pendant 1831*," (Paris, 1834,) wherein, for a complete organization of public instruction, he states the four following points: 1, that boys and girls without exception should attend the elementary schools; 2, the middle class of the city population to have its schools; 3, a sufficient number of young men of the middle and higher ranks should attend the lower classes of the gymnasiums together; 4, a good number of these, according to their industry and capacity, should attend the higher classes, and thence proceed to the university; adding, "*Cet idéal est à peu près réalisé en Prusse.*" Friedrich Thiersch expressed himself in the same way in his Report on the reorganization of secondary schools in Bavaria, on "*The Present Condition of Public Instruction in the Western States of Germany*: Stuttgart and Tübingen, 1838.) "I found myself there," he says, "(Coblenz, September, 1834,) in a land which, for an observer in public instruction, is of much importance, and which, by its institutions of learning, its spirit of order, its administration, and the results obtained, had attracted the attention, yea even the admiration of foreign countries."

After the death of Altenstein, King Frederic William IV. appointed Dr. Eichhorn as minister of ecclesiastical affairs. He had been one of the most active supporters of the aggrandizement of Prussia against French supremacy. In 1817 he was called by the special confidence of the king, into the newly organized State councils, and since 1831, he filled, amidst general appreciation and esteem, the position of director in the Ministry of Foreign Affairs. His continued and lively intercourse with the most distinguished scholars of Berlin, his friendly intimacy with Schleiermacher and many other men of distinction in science and theology, his whole past life, devoted to the interest of Prussia and in support of its noble

efforts, caused his appointment to be hailed on all sides as a most fortunate one. And yet, through the very power of circumstances, was he carried away into such an opposition to all the ruling efforts of the time, that perhaps there never was another administration whose beginning and end gave rise to such differences of opinion. The attitude which Eichhorn took towards the Hegelian philosophy, till then almost exclusively in favor, and which he considered to produce nothing but dialectical sleights of hand, and as tending to undermine the Christian principle of life, his faith drawing ever closer to orthodoxy, had to be adjusted in the higher school-administration by different views and principles. He had certainly only undertaken the Ministry when he saw that his private conviction was in perfect harmony with the opinion of the king, and he was persuaded that when the views and ideas of the king were properly understood, treated as a unity, and carried out, there would be more cause than ever before to hope for the regeneration of Prussia and Germany—a regeneration which would give entire satisfaction to all free-thinking and reasonable wishes, and to all just demands.

The condition of public instruction was a cardinal object of the king's solicitude. It can not be denied that in the last twenty years the gymnasiums had to contend with much that was unfavorable. The new impulse given to industrial pursuits cast a certain reproach upon gymnastical studies, and made them appear superfluous; and seemed to require another species of high-schools, in which the realistic and practical should be recognized and provided for. The teacher could see in the younger generation a kind of pantheistical turn of mind which appeared unfavorable to Christianity. An ever greater disproportion in the outward circumstances of the teacher, with the increasing wealth that seemed to reach every one but him, became sensibly apparent; finally the unusual zeal with which everywhere higher culture was encouraged, had formed for the State, the Church, and the profession of teaching a greater number of individuals than could be well employed, and these had not yet found, after going through college, their adequate circle of activity in other spheres of life. Many of those also who had been educated in the so-called practical schools, had not yet learned to apply their acquired knowledge to their several trades, and to raise them in value. Eichhorn wished to remedy all these evils, and to satisfy all just demands. He aimed to give to the higher school-administration such an organization as would enable its members to take a more life-inspiring view of the actual condition of the schools, and a more active cooperation in their welfare. He was resolved to organize, under the name of supreme school-council, a higher, technical school-committee or section, which, for the administration of the inner life of the public establishments of learning, should enter into all the questions touching the qualifications of the teacher, the object, methods, and necessary means of teaching, and provide for this work a sufficient number of theoretical and practical men already eminent in the profession. The events of March 18, 1848, de-

prived him of his position and frustrated the realization of his plans.* The only lasting change that was made during his administration, was the re-introduction of gymnastics, by a cabinet order, June 6, 1842; and according to the king's own wish, this branch of instruction was made an integral part in the education of the people.

A few weeks after Eichhorn, Dr. Eiler also left the ministry, (Dec. 30, 1848.) He had been previously gymnasium director at Kreuznach, then school-counselor at Coblenz, and since December 1, 1840, co-laborer in the Ministry, where, October 30, 1843, he was elected speaker of the council-chamber. He enjoyed the particular confidence of his minister, and coöperated in the department of education for the high-schools, when it came to a question of morals, or to fill the vacancies of directors and teachers.

As Eichhorn could not expect of his counselors to be active, where he himself could not act according to his inner conviction, he had intrusted the conduct of the evangelical gymnasium affairs to Kortüm, privy counselor of the supreme court, who till then had had charge of the public instruction. Having previously been director of a gymnasium and schoolmaster of Dusseldorf, the latter was perfectly competent to undertake the gymnasium affairs. Prudent and considerate, he avoided making any unnecessary changes. John Schulze retained his position as reporter of universities, in which, after fifty years of service, he died, privy supreme counselor, regretted by all who had appreciated his high merits and the eminent services he had rendered to public education. Amidst the confusion and conflicting opinions of 1848 and the years following, when Count of Schwerin till June 25, Rodbertus till July 3, and Von Ladenberg as commissioner till December 19, 1850, conducted the ministerial affairs, Kortüm acted as mediator in the administration, and endeavored to soothe and harmonize if possible the antagonistic elements of that time. After a repeated and violent call for a closer connection between the higher private schools and the so-called real schools, he inclined towards the idea of fusing into one the three lower classes of the two institutions, but the transactions of the country school-conference, of which he was president from April 16 till May 11, 1849, and still more the discussion on the education laws in the ministry itself, brought him back to the opinion that the principle upon which the gymnasiums and real schools were based, should be considered as an independent one. He retired from public life, June 7, 1852. His place was filled by Dr. L. Wiese, then professor in the Joachim gymnasium, previously privy state counselor and inspector of the higher academies.

From 1850 to November 8, 1858, the ministerial affairs were conducted by Von Raumer. The latter found no occasion to make any radical changes in the high-school administration, and made it his chief duty to direct well and improve what had already been done. In this, however,

* See *Eichhorn Ministry*, by a Colleague. Berlin: 1849. *My Pilgrimage through Life*, by Dr. Gerd. Eilers; vol. iv. Leipzig: 1856.

he found various opportunities for improvements; among these may be named the changes made in 1856, in the recitation system and the regulations for the examinations, both of which tended towards a simplification and greater concentration in instruction. He made it his chief object to see personally after the inner and outer welfare of all the institutions of learning, having the most distant ones visited by departmental counselors of the ministry, and attending to those of the capital himself. The better to train young teachers for the profession, it was thought worth while to induce distinguished schoolmen to adopt as disciples young philologists and mathematicians, that they might learn the art of teaching. Under his administration, fourteen gymnasiums were founded, and the position of the gymnasium teachers improved by an increase of salary of 18 per cent.

Von Raumer's resignation gave the conduct of ministerial affairs to Von Bethmann-Hollweg, whose independent and dignified manners, and political talents, as well as his high intellectual and scientific merits, raised many expectations and ardent hopes. But his short administration, which lasted only till March 10, 1862, interrupted as it was by political party troubles, allowed him only to carry out what was already begun. It proved, however, an important one for the real schools and the higher private schools, which, by the instruction and regulation of October 6, 1859, received an independent organization. As reference to his administration, he published in 1860 a report, under the name "Central Journal of all Educational affairs."

He was succeeded by Von Mühler, who till then had occupied the position of president of the supreme church-council, and since 1840 had been co-laborer and speaker in the ministry. His career was marked by a great activity for improvements, by various foundations of higher institutions and generous endowments, and by the care he took and the judgment he showed in promoting the development and formation of the higher instruction.

The affairs of the Catholic schools were, since 1839, conducted in the ministry by Brüggemann, who displayed in the discharge of his duties much zeal and circumspection. He was born, March 31, 1796. In 1823 he was second director of the gymnasium of Düsseldorf, and stood next to Kortüm, at the same time consistory-counselor. In 1881 he was made State and school-counselor at Coblenz, and in 1887 was called to the ministry of Berlin, and sent to Rome as mediator during the ecclesiastical disputes of that time. In 1889 he became co-laborer in the ministry; in 1841, privy State counselor; in 1861, privy supreme State counselor. He died March 31, 1866, shortly after having tendered the resignation of his office, which he had held to the satisfaction of all parties. The province school-counselor of Breslau, Dr. Stieve, succeeded him as privy State counselor.

B. SINGLE PROVINCES.

During the gradual development of a central administration in the Prussian States, it was a necessary condition of things, that the various

peculiarities of the single territories in their school-administration should be retained. The General Directory instituted by Frederic William I. embraced four Departments, as follows:—1, Prussia, Pomerania, Newmark; 2, Minden, Ravensberg, Tecklenburg, Linzen; 3, Kurmark, Magdeburg, Halberstadt; 4, Geldern, Cleves, Mörs, Neufchatel. After 1750, the supervision of public instruction in the whole kingdom was conducted by the consistories of the provinces, together with distinguished doctors and professors of theology, the whole under the general inspection of the higher consistories of Berlin. Silesia had its own high consistories at Breslau, Brieg, and Glogau.

When, in 1808, the supreme administration of matters of instruction was given over to the Department of the Interior, the councils of the provinces received the name of governments; in each of these a Deputation for Public Worship and Instruction was established as a special council, to be under the immediate dependence of the section of the department belonging to the place. The regulation of October 27, 1810, ordered besides, three scientific deputations for public instruction in Berlin, Königsberg, and Breslau. Their office consisted in the examination of the candidates for the higher school profession, in plans of teaching, methods, and text-books, as well as all that related to the final examinations at the gymnasiums, (maturity examination, *Abiturienten Prüfungen*.) They were further to give their opinion on all that concerned the practical management of schools, and to maintain in use those principles of science from which the single maxims of administration are derived. They were also at liberty to send to the higher council any propositions or requests on the subject of education. The deputation in Berlin, to which, beside Nicolovius and Süvern, also Ancillon, Schleiermacher and Fr. A. Wolf belonged, was to take the place of the supreme school-board (*Oberschul-collegium*), which had been abolished in 1808.

After the new division of the State, which comprised at first ten, then eight provinces, the direction of the affairs of public instruction was given to the chief president (*Oberpräsident*), of the several provinces. He presided over the consistory instituted in the principal city of the province. By the regulation of October 28, 1817, the consistories were to take charge of the internal affairs of the church and school, and the governments of their external affairs, especially of the administration of the church and school property. The scientific deputations were replaced by the literary commissions for examination. The consistories had also the right of inspection over the affairs of Roman Catholic schools and education, but the Catholic bishops retained their legal control over their form of government and religious instruction, and had the nomination of their special religious teachers. For the affairs of secondary schools of the province school-collegiums, (*Provincial schul-collegien*), were instituted, in 1826, separated from the consistorium entirely in 1845, and the separation of funds followed in 1848. The whole of the administration of the property of the institutions belonging to the school-colle-

giums passed with few exceptions over to these. The seats of school-collegiums are established in Königsberg, Posen, Breslau, Stettin, Magdeburg, Munster, Coblenz, Berlin.

The instructions of May 14, 1829, imposed on the general superintendents the duty of directing their special attention towards the religious and clerical tendency of the higher academies and private schools; they could be represented in their school-inspection by members of the royal consistories and by consistorial representative school-counselors of the royal governments. For the appointment of religious teachers, a unanimous vote of the church and school-councils is necessary. Religious instruction can only be intrusted to those teachers or clergymen, against whom the respective church-councils make no objection. New religious text-books can only be introduced with the approbation of the church-councils. Where there is a board of trustees, it is the custom to appoint the first clergymen of the place as one of them.

I. *Prussia.* It was among the great masters of the religious orders of the country, and particularly through Winrich von Kniprode (1351-1382,) that the first efforts were made for the establishment of schools. "It is absolutely necessary," said he, "that, not only a few, but many schools be established in Prussia." Notwithstanding this earnest advice, however, it was only after Albert of Brandenburg (1510-1568) that Latin schools were established, and that, in the principal cities only. These, however, increased and improved considerably after the introduction of the Reformation. After the conquest of Western Prussia in 1772, the valid school-laws of Eastern Prussia were established in the new countries also, and the schools of the Jesuits partly organized into royal Catholic gymnasiums. At the second division of Poland, in 1793, by which, under the name of South Prussia, with the exception of Posen, the cities of Danzig and Thorn with their old schools were incorporated, the ratification patent recommended, concerning the institution of religious and civil judicature in the new province, that, to secure peace and happiness for the annexed country, it was necessary to give special care and attention to education, and called upon the churches and schools to further this object. That portion of Poland which became Prussia's share in the third division, in 1795, was lost again by the peace of Tilsit (1807,) and finally annexed to Russia in 1815. Many and various obstacles still prevent the successful development of the higher schools in this province. The scholars, particularly in the smaller towns, belong mostly to the lower ranks—enter the higher schools only when already advanced in years, and suffer especially from the pressure of domestic circumstances.

II. *Posen.* That portion of South Prussia which, falling back to the kingdom, was constituted into a separate province, under the name of the Grand Duchy of Posen, received no special laws for its school-administration, but became subject to the general rules. It contained in 1815 only two higher academies: the gymnasium (*Symultan-gymnasium*) for both confessions at Posen, and the school at Lissa. Since then, the royal

government, and following the latter's example, the cities also, have made it an object to promote higher education, and succeeded in establishing nine gymnasiums, one progymnasium, five independent real-schools of the first class, among which are four gymnasiums, one royal real-school, four gymnasiums, three real-schools, a municipal progymnasium, one real-school of mixed patronage; as Catholic institutions, two gymnasiums, three simultaneous gymnasiums, a progymnasium, and two real-schools.

The gymnasium at Trzemeszno was abolished for political reasons in 1863. Particular arrangements had to be made for this province on account of the mixed character of its population. The clerical supervision council for the evangelical institutions and the evangelical religious instruction, is the royal consistory and the general superintendent at Posen, and for the Roman Catholic department, the archbishop of Gnesen and Posen. The great number of Jewish pupils necessitated municipal patronage for Jewish religious instruction. In regard to the German and Polish languages, the instructions of May 24, 1842, provided, without however establishing by it an invariable regulation, that in the Mariengymnasium at Posen and the lately abolished one at Trzemeszno, as well as in those established in the Southern portion, such teachers should if possible be appointed for the four lower classes, as were sufficiently conversant with both languages, so that every pupil could receive religious instruction in his mother tongue. In all other branches of education, the teacher was to impart instruction in the Polish tongue, using the German somewhat, but taking special care that the pupils receive a clear and distinct idea of the subject in hand. The pupils obtained thus before leaving the third class (*Tertia*) an easy and correct understanding of the German language. In the second class (*Secunda*) the German became the principal medium of instruction, together with the study of the Latin and Greek authors, alternately translated either into Polish or German, according to the special capacity of the teacher in either language. For the Polish tongue and literature the Polish was to be exclusively used, also for mathematics, physiology, and the study of French. The same course was to be pursued in the higher classes. At present, the German is, commencing in *Tertia*, the principal medium for instruction, embracing two-thirds of the whole course. The religious instruction for the Roman Catholics is given in Polish. The German pupils of this persuasion must necessarily suffer in this case, as the teacher can give them, after recitation, but a short and rapid review of the subject treated.

It has been impossible as yet to fuse and unify the various elements of the Prussian population, as the Poles, especially in their higher strata, preserve an inflexible nationality. The Polish youth of the higher schools took so lively a part in all political movements of their nation, that it became necessary for the Prussian government to use strong repressive measures. Many students, who had taken an active part in the revolution in 1830 and 1831, were, at their return, in spite of the general decree

of amnesty, shut out from the public institutions of learning, "in order to prevent the propagation of injurious opinions amongst a class of youth easily impressed either by good or bad principles." All subsequent political troubles that arose in the Grand Duchy, as well as in the kingdom, carried off with them a great number of young students. A similar movement also occasioned, in 1862, the closing of the gymnasium at Trzemeszno.

III. *Silesia.* The province of Silesia, since 1815, has been composed of the Silesian Grand Duchies, formerly governed by the Piast princes, and of a portion of the original Higher Saxony. Owing to the sovereign jurisdiction of the kings of Bohemia over the Silesian dukes, many relations were formed between the church and the school which in some degree are still valid. After the erection of Breslau into a bishopric, many parochial and convent-schools arose, which were gradually turned into Latin schools. But the establishment of new schools received very great encouragement, especially in Lower Silesia, by the spreading of the Reformation, as dukes, knights and cities rivaled each other in establishing new schools, and in perfecting and improving the already existing ones. The high-school at Goldberg, destroyed by the Thirty Years' War, in 1631, enjoyed under Valentin Trotzendorf, about the middle of the sixteenth century, a very high reputation. Amongst the still existing gymnasiums, the school at Beuthen flourished for a short time; it had been extended in the beginning of the seventeenth century, by the Baron Georg von Schönaich at Carolath, into a pedagogium, and connected with an academic gymnasium. Amongst its students was Martin Opitz. But this school also was destroyed by the first storms of the Thirty Years' War. This war opened the province to the Jesuits, who, before its close, had established colleges in all important towns, and exercised a great influence on education until their institutions passed again into other hands. The intervention of Charles XII. of Sweden, and the conquests of Frederic the Great, soon reinstated the Evangelical portion of the population into the full enjoyment of the rights and liberties which the peace of Westphalia had secured to them. After the abolition of the order of the Jesuits in 1778, Frederic II. converted their schools into royal gymnasiums, under the direction of their former Jesuits, with the name of priests of the royal school-institutes, and the proceeds from the sale of the Jesuits' lands were appropriated for the support of all Catholic gymnasiums of the province. The reorganizing of the plan of instruction was intrusted to the professor of mathematics, Zeplichal. According to the new school-regulation of December 11, 1774, the University of Breslau was to retain its four literary classes—grammar, æsthetics, philosophy and theology; the Catholic gymnasiums of Glatz, Neisse, Oppeln, Sagan, Liegnitz, only grammar and æsthetics; those of Glogau and Schweidnitz, grammar alone. As this school-organization did not prove beneficial, the preparation of a new plan of organization for Catholic schools was given to the professor of the Catholic gymnasium at Glogau, Sckeyde. The

plan which the latter laid out, and which from the character of the time had to meet if possible a universal purpose, comprised, along with the already very detailed prescriptions which formed the basis of the system, a great variety of subjects; such as declamation and the cultivation of taste, the philosophy of experience and logic, general and especially anthropological science, æsthetics, mythology, Roman antiquities, ancient geography, universal history, experimental physiology, the circle of the sciences, to all of which branches about an hour a week was devoted. This plan, drawn up for the Catholic gymnasiums, was published August 1, 1801. As the royal government of Breslau had instituted (October 27, 1810,) a clerical school-deputation, so was the new organization of secondary-school affairs also extended over the Catholic institutions, and, by the reunion of the university at Frankfort on the Oder with the Leopoldina at Breslau, August 8, 1811, the former connection of the Catholic gymnasiums with the university was entirely dissolved. The reduction of those higher schools that could easily be dispensed with, and which, besides, could afford but a bare existence, had, in a measure, already been accomplished by the cabinet order of July 8, 1798; such were those of Jauer, Freistadt, Bunglau, Löwenberg, and those founded at Rauden and Grüssau by the Order of the Cisterciensien: they were gradually closed. On the other hand, the State took charge, from that time, of some of the new high-schools; others were founded or renewed by cities, and many of them, especially within the last twenty years, received considerable contributions from public funds.

Amongst the present gymnasiums, there are fifteen of them Evangelical, and eight Roman Catholic; the progymnasium is Evangelical, four Evangelical real schools, two united, the higher private-school Evangelical. The clerical supervision of the Catholic institutions belongs to the prince-bishop of Breslau, but the gymnasium of Leobschütz, by right of former custom, comes under that of the ducal-archbishop of Olmutz, and the gymnasium of Glatz under that of the ducal-archbishop of Prague. The active spirit of progress which distinguishes the Silesians has called forth considerable appropriations for public institutions, especially for scholars; for instance, of the Catholic religion, (scholars who speak the German and Polish languages,) there are scholarships of the State and ducal-bishoprics.

IV. *Pomerania.* The original Slavonian population, with the exception of the Northeastern little province of Kassuben, became, after the introduction of Christianity, completely germanized. In 1456, Wratisslaw IX. founded the University of Greifswald, as a scientific centre for the duchy; but, before the Reformation, there were but very small beginnings of schools. The Reformation accomplished by Bugenhagen and Knipstro, and zealously favored by the princes, gave rise to the establishment of a great number of private Latin schools. There appeared, especially after Bugenhagen's church and school regulations (1535 and 1563,) under princely protection or through the princes' means, and the wealth

of the Hanseatic towns, a number of gymnasiums and academies for the nobility; amongst these, the academic colleges of Stettin and Stargard held for a long time the first rank. When in 1804 a reorganization for the higher schools was contemplated, the originally Prussian parts of the province seemed to be sufficiently provided for in the gymnasiums of Stettin, Cöslin, and New Stettin, and in the four real-schools at Stargard, Anclam, Colberg and Stolpe, and in fact they met all the demands until lately, when the question of new gymnasiums and a change in the existing polytechnical schools came up, and was zealously discussed, especially by the wealthier communities of the towns; so that the province possesses now thirteen gymnasiums, one progymnasium, two polytechnical schools of the first class, two polytechnical schools connected with gymnasiums, the one of the first, the other of the second class; one independent grammar school, one higher grammar school connected with a gymnasium—all Evangelical, and of which a part is richly endowed with benefices for scholars and students. As a peculiarity of the new gymnasiums at Greiffenberg, Treptow on the Rhine, Stolpe, Colberg, and Pyritz, we may state the fact, that every teacher must bind himself by written agreement "to teach nothing contrary to the Word of God as contained in the religious works of the Evangelical community of the place, and expounded in the Lutheran catechism." These institutions, although subject, like the rest, to the consistory and general superintendence of church affairs, differ in this respect from the others who consider themselves as belonging to the united Evangelical Church of the State.

V. *Saxony*. This province consists, 1st, of the original Hohenzollern possessions, the Altmark: 2d, of the provinces annexed by the peace of Westphalia, in 1648, the Duchy of Halberstadt, the Duchy of Magdeburg and the Circle of Saal; 3d, of the lands acquired during the present century, the bishopric of Quedlinburg, the empire towns of Mühlhausen and Nordhausen, the electorate composed of the lands belonging to the Mayence circle, Erfurt and Eichsfeld, the archbishoprics of Merseburg and Naumburg-Weitz, and the Circles of Wittenberg and Thuringen, formerly belonging to the kingdom of Saxony. The foundation of schools extends here as far back as the Carlovingian times and the Saxon emperors. In the fifteenth century these early schools were however already on the wane, and needed the new and invigorating life of the Reformation. Luther and Melancthon, as well as the Saxon princes, became the most zealous protectors of the schools, and the Saxon school regulation of 1523 became the new foundation for the administration of schools. From among the foundations of Duke Moritz of Saxony, the State-school of Pforta was made over to Prussia in 1815, and already before that time, from those of the counts and nobles, the schools of Eisleben, and the convent-schools of Rosleben and Donndorff. Among the Latin schools that were closed in the course of time, the pedagogium at Kloster Berge before Magdeburg was distinguished; it flourished particularly under the abbot Steinmetz (1782-62;) but it was abolished by a decree of the

Westphalian government in 1809, and its buildings destroyed in 1814, during the French siege. Among its present higher institutions for learning are one Roman Catholic gymnasium, one gymnasium and one polytechnic school as simultaneous institutions; they are under Roman Catholic supervision, the bishop of Paderborn being inspector. No province possesses as many alumni connected with the higher institutions, and as many beneficently endowed schools. No province moreover has as many schools of old and well tried reputation, such as Schulpforta, and above all the Frankish foundations at Halle.

VI. Westphalia. The oldest possessions of Hohenzollern date from the seventeenth century, whilst the counties of Mark and Ravensberg fell to Brandenburg by heir loom, (1614,) and the secularized foundation of Minden, by the peace of Westphalia. The lands conquered by the peace of Luneville were mostly made over to the kingdom of Westphalia, but returned to Prussia in 1815, together with the whole of the Episcopal foundation of Münster, the Duchy of Westphalia, (Arnsberg,) the Principality of Lügen, etc.

For the establishment of schools in these countries, different religious orders—especially the Franciscan monks and later the Jesuits—had been already active at a very early date; an Evangelical gymnasium was founded at Hamm in 1657, by the prince-elector; the landowners and cities showed themselves also very active after the Reformation, in the establishment of Evangelical schools, so that Prussia gained by the annexation of this province, six Evangelical and three Catholic gymnasiums. Besides, several convent-schools, preparatory to the university, are now either transformed into gymnasiums or progymnasiums, or have entirely ceased to belong to the higher schools. Among the thirty of this kind existing at present, there are eight gymnasiums, five progymnasiums, one Catholic polytechnic school of the first class, the others Evangelical. The diocesan council for the Catholic schools in the governmental district of Münster are the bishop of Münster, and for the other parts, the bishop of Paderborn. Most institutions have benevolent endowments both for pupils and students; for the Catholics born in the province there are in Cologne and Mayence old and largely endowed foundations. One of the peculiar institutions in this province is the Evangelical gymnasium, founded at Gütersloh, during the stormy period of 1848. In the fear of the State becoming atheistical, and that the existing schools under its supervision might fall off from the established Church, the plan was conceived to create new gymnasiums, independent of the State, and of a decided Christian evangelical character. This plan however was only carried out at Gütersloh, after a voluntary contribution of 20,000 florins had been collected. The institution was opened as a "higher private academy," June 15, 1851. It is governed by a board of trustees consisting of twelve persons, most of whom are clergymen, elected among themselves by mutual consent. The king, Frederic William IV., was so interested in this institution, that he himself laid, March 26, 1852, the corner-

stone of the new school-building. In 1854 the institution was recognized as a gymnasium. Its first closing examination (graduate) (*Abiturienten Prüfung*) had already taken place at Easter, 1858; and at Christmas, 1863, one hundred and forty-one graduates (*Abiturienten*) were examined, which, from an average number of two hundred pupils, is the largest number of graduates any institution has yet had to show. Half of these graduates passed over to the study of theology.

At the recovery of the province, the consistorial school-counselor, Frederic Kohlrausch (1818-1880,) under the first president, Von Vincke, took the most active part in the direction of school affairs, and by his personal influence upon the directors and teachers, as well as by his excellent measures of administration and the zeal with which he endeavored to spread a freer literary culture among the better classes, won for himself a lasting reputation.

VII. *Province of the Rhine, and districts of Hohenzollern.* This large province, comprising six governmental districts and one hundred and thirty-nine cities, with over three millions of inhabitants, belongs (1815) to the former possessions of Prussia: the duchy of Cleves (1614,) the ducal county of Mörs (1702,) a portion of the duchy of Gueldre (1713,) and the lands conquered by the peace of Vienna, eighty states originally belonging to the Empire; the largest part belonged to the Palatinate, and to the Electorate-ducal archbishoprics, Treves and Cologne, secularized in 1803.

The foundation of schools in these countries extends as far back as Charlemagne; religious orders developed them, especially that of the Jesuits, whose schools, richly endowed and with wholly gratuitous instruction, attracted many pupils, even after the Reformation, which had also gained much ground in the Rhine countries. Evangelical schools arose principally as institutions of cities and church communities. The French occupation (1794-1814,) transforming every thing regardless of all territorial relations, brought about also a complete change in school affairs, remodeling these according to French principles, which required again a thorough retransformation as soon as the foreign sway was annulled. The central administration of the allies organized, in 1814, the general governments of Berg, Middle-Rhine, and Low-Rhine, which, united in 1815, came under the direction of the Prussian Privy State counselor Sack, who till then had been general governor of the Low-Rhine, and as early as March, 1814, had directed his particular attention to the schools. There were about this time in the whole province, six high-schools, which might, in a certain degree, be considered as gymnasia; in all the general governments of the Lower and Middle Rhine, only three gymnasia: those of Cleves, Mörs and Kreuznach, of which the two first died entirely out under the French dominion, and the last was already in its death-struggle. A number of decrees, it is true, drove from the convent-schools the monkish spirit, but put in its stead French Napoleonism, which made every thing conform to military power

and to the universal dominion of the great Empire. The majority of teachers slavishly bent the knee before the despotism of French school-inspectors. The French language was to be the only medium of instruction; teachers that were not masters of it were dismissed. To study the Greek and Roman classics was, in the eyes of the Grand Master of the French University, altogether superfluous, since the French literature presented far greater models, and in every species of style. Why direct the public mind upon the heroes of antiquity, when the mind of the French people contained and united, all that ever any nation developed in greatness, power and heroism, and when the hero of the French nation, obscured the glory of all former heroes? A third of the time was devoted to French grammar and reading, another third to Latin rhetoric, and the last third to all sorts of curiosities, with no other aim than that of amusement. As accessories served the so-called *Silentien* (study-hours,) a sort of review of the lessons, under the eye and constant direction of the teacher. The French university system recognized only two sorts of high-schools: 1, the lyceums of the State, and 2, the colleges and secondary-schools supported by the communities. The colleges of the first degree resembled the lyceums in a great measure, differing more in form than in substance, the form being wholly military.

The Lyceum system found a readier acceptance on the left shore of the Rhine than on the right; the Lyceum of Bonn and the College of Cologne working itself zealously up into a lyceum, gave but feeble promises. Amongst the colleges of the second degree, there were a few private institutions over which presided a principal, with a faculty of his own choice. These establishments were under strict control, but even those were not organized in the spirit of the administration, and were left without sufficient support; even the money they did receive was of no great use either to the teachers or to the pupils.

Those colleges that refused to accommodate themselves to the domineering spirit of the foreign power, lost generally all they possessed. Their endowments, the income of which served to pay the teachers' salary, was confiscated as public property, and such as in some special cases was left them, was very carelessly managed. From the confiscated lands, a miserable pension was allowed to the teachers, and gradually all courage and enthusiasm for the profession, as well as the confidence of the public, were destroyed. The number of teachers and pupils grew less and less; no one wished to engage in a profession that presented neither a comfortable nor an honorable living. What thus remained of the colleges was generally confined to a few members of the religious orders, who served both in church and school, and enjoyed benefices; men that had no other object in school-teaching than to fulfill the duty imposed upon them by the Church or the rules of their Order. Among the larger schools for the training of teachers, in which a few lucrative chairs were left, all the higher and better positions were filled by Frenchmen, either natives or that had become French; the middle ranks were

provided by some of the former teachers, and the lower by young routinists (routiniers) who had never enjoyed a high literary culture, and who, by continuous experimenting, hoped to acquire a certain practice of teaching. These positions, of so-called *maitres supplémentaires, et d'étude*, served, in the absence of regular seminaries, as institutions for the preparation of the future teachers of the higher schools. Among the twenty schools for the training of teachers, five only had a sufficient number of professors, as many had only three professors, and three of them but one. Of the 92 Catholic gymnasium professors, none had visited a German University abroad; most had received their education in religious seminaries or in the decaying University of Cologne; a third of them finally had stepped right from the school-room into the professor's chair.

In order to improve the condition of the schools for the training of teachers, the collection of the arrears which several communities had to pay to their schools, according to budget duty, was zealously carried on, and a number of schools received considerable help and contributions from the treasury of the State. For the improvement of their internal condition, the Director of Public Instruction of the Lower-Rhine, Grasshof, afterwards consistorial school-counselor (1841), issued a preliminary instruction to the effect, that an effort should be made to harmonize, if possible, the monachal system of instruction which, strangely mixed as it was with the Parisian University maxims, seemed to prevail still almost everywhere, and the ruling principles of the gymnasiums of the North of Germany; combining, as it were, the two. For that purpose, school and academic instruction should be kept apart; the Greek language and history should resume their respective places, and the usurping foreign language be again replaced by the mother tongue. This was a hard task for the teachers; but it was only after such a beginning that the Department of Education could in future prepare and issue with any effect, general school regulations. The new spirit of reform had to proceed from single enlightened points, and the city of Cologne, before all other cities of the four Rhenish departments, was best calculated for such an attempt. Its antique dignity, its importance during the middle ages, its spiritual sway over all the Catholic countries around, and its literary taste, rendered it worthy to become the central point of high culture. This state of feeling was specially strengthened by two important facts, viz., its relatively larger number of suitable teachers, and the ever growing desire of the inhabitants to do away with French forms in its colleges. When the finances so badly administered by the existing school-commission were at last regulated, a beginning was made in 1815 to bring about the organization of the new Gymnasium, which was to take the place of both the colleges of the first and second degree. The applicants for professorships had to pass a severe examination, but all attempts to fill the higher chairs with capable men of the Catholic persuasion remained fruitless; the demands made upon the professors had come

considerably down, in order to enable the authorities to fill the gaps. This reform, by which true merit recovered its due rights, called back among the better teachers their enthusiasm for their profession, and the unity of purpose brought back again the unity of spirit, which had become lost among the teachers of the former institution. The schools for teachers of the Middle Rhine needed the same reform, but none of them possessed with the same receptibility for improvement, the necessary means to bring about the required change; it was even difficult to keep the colleges of Bonn and Coblenz from falling below their former condition.

As little as could be done in the latter part of 1815 for the teachers' schools, by way of donations to further the means of improvement; as little as the administration seemed disposed to take decided steps in the matter, helping only in extraordinary cases, nevertheless, and just at that time was the foundation laid for the internal improvement of these institutions, and that so much the deeper, as the sense of an earnest and thorough study of the classics had grown more vivid. The mathematics and history were gradually reinstated into their former rights; the study of the mother tongue, of its origin and progress, drove away the foreign language, and the old uniformity and superficial mode of study retired evermore into the background. Although this could only be said of a few enlightened points, and although in the smaller colleges and amidst the old teachers the old track of study was still in force, yet might it be considered as quite a gain, that such enlightened points, however few, existed in the province.

The gymnasium of Treves had lately been brought under Prussian administration, but was neither sufficiently endowed to defray expenses, nor possessed a sufficient corps of teachers. When through the Peace of Vienna, Prussia lost Lüttich, Aix-la-Chapelle claimed for the North-western part of its school-governments a greater attention from the administration; the gymnasium of that place was the only one from which a better spirit could emanate, and influence the smaller institutions of the same kind. The new gymnasium of Cologne, which by the accession of Director Franz Jos. Seber, 1815-19, (formerly professor at Aschaffenburg, afterwards professor of theology in the University of Bonn,) became at that time fully consolidated, verified the firmness of the ground upon which it had been erected. The new system of recitation carried out conscientiously in all its parts, according to the given regulations, the ardor and zeal equally obvious in both teachers and pupils, to enter not only into the outer form of these regulations but into their spirit also, the results of the last quarterly examination, the admirable discipline and order, the esteem and love the new Director had inspired in his colleagues and pupils, and the universal confidence he and his institution enjoyed amongst the public—all this gave sufficient proof of the excellence of the school, and secured its influence for laying the foundation of a still higher culture through the whole province.

The wisdom which presided over the reorganization of this and the other high-schools, namely, to reach gradually and not all at once, a higher degree of perfection, and to lay greater stress upon the capacity of individuals than upon mere rules, secured so much surer a passage from the old to the new, as by it the sunken rocks upon which they might have been wrecked were thus carefully avoided.

The sooner there was an inclination to favor a serious and thorough study of the ancients, the more the necessity for a firm foundation in this branch was accepted and recognized by the gymnasium, the more the conviction spread that in the vast domain of the mathematics, and in the inexhaustible depths of history, lay the rich stores for the mind and sensibilities of men, the more ardent became the desire for a University in the German sense of the word, a University from which alone teachers could be expected, that would carry out its views and would be imbued with its spirit. A petition to that effect was laid before the ministry, to urge upon the king the foundation of a University on a large scale in the city of Bonn, which petition was also granted on the 18th of October, after the closing of the older universities in 1818.

The words of the proclamation of Frederic William III., April 5, 1815, addressed to the Prussian Rhine countries:—"I will reopen for your children the institutions for public instruction which have been so neglected under the pressure of the last administration," were faithfully kept. The province possesses now twenty-four gymnasiums, fourteen progymnasiums, ten real schools of the first order, two real schools of the second order, ten higher burgher schools, of which fourteen gymnasiums, eight progymnasiums, two higher burgher schools, are Catholic; one gymnasium, one progymnasium, one real school of the second order are united, and two progymnasiums, five real and two higher citizen schools whose religious denomination has not yet been determined. In all the institutions there are pupils of various denominations; only the academy for young noblemen at Bedburg, opened in 1842 for the nobility of the Rhine, has preserved throughout its genuine Catholic character. The ecclesiastical inspection for the Catholic schools in the Rhenish provinces consists of the archbishop of Cologne and the bishops of Munster and Treves, and for the Hohenzollern population, the archbishop of Freiburg. The remarkable industrial activity of the people has particularly favored the foundation of real schools and higher burgher schools. The first Rhenish provincial diet made the furtherance of these institutions the object of a special petition, and received from the government a favorable answer; but the petition of the 27th of October, 1856, asking for a wider range in the establishment of real-schools, remained unheeded. The proposed union of the higher burgher schools with classes of the progymnasiums, shows that humane culture stood in great favor.

VIII. *Brandenburg*.—This province, the central point of the monarchy, consists now of Kurmark, Neumark, and the portions of the Lower Electorate, in the kingdom of Saxony, which were added to these in 1815;

Altmark belongs to the province of Saxony. The University of Frankfurt on the Oder, (1505,) was the beginning of the literary life that was to shed later from this province, light and culture over all parts, and proclaim, especially through its schools, the glory of Prussia to the most distant countries. After the introduction of the Reformation, there were founded, in 1574, under John George, and by the magistrate of Berlin, the gymnasium of the Gray Convent, and in 1607, by Joachim Frederic, a pedagogium at Joachimsthal. The latter, which, after its school-buildings had been destroyed by Cursaxon soldiers, (1636,) was transported to Berlin, is still flourishing, richly endowed, and known under the name of the gymnasium of Joachimsthal. As Berlin is the constant seat of the central administration, all its general school laws and regulations became special ones for the province, which, through the foundation of the Frederic William University of Berlin (1810,) grew ever stronger under the unceasing influence of its life and light. It possesses forty-five higher institutions, all evangelical, of which only four gymnasia and one real school, the first opened in 1747 by Joh. Jal. Hecker, are under royal patronage. The common councils of the cities, especially of Berlin, have, since they recovered from the heavy war burdens, under which this province suffered particularly, raised considerable means for establishing new schools of all sorts, and the capital shows at this moment a most praiseworthy zeal to set an example to the other towns of the country in the care and attention given to schools.

C. LOCAL ADMINISTRATION.

In the local administration, the institutions of royal foundation are under the immediate patronage of the crown; there is no immediate jurisdiction between them and the school-colleges. In the higher institutions of towns, the magistrate of the place exercises generally the immediate right of patronage. The regulation of the minister Von Schuckmann, July 26, 1811, provided in every city, for all that related to school affairs, one council only under the name of school-deputation, which, according to the size of the place, and the importance of its schools, was to consist of from one to three members of the magistrature, of the city college, and of an equal number of special citizen deputies, to whom, in the larger town, was also adjoined a superintendent. Such schools as were not under the city patronage of the school-deputation, as, for example, the Jewish schools, had to send a representative. As, however, in the course of time a special administration was provided for the higher schools, the former became subordinate to the latter, or existed only, as in the province of Prussia, for the purpose of taking cognition of systems of instruction, or, as in Berlin, of keeping statistical accounts, especially in regard to regular school attendance.

In most cities, the right of patronage is exercised by the magistrate, who in later times has adjoined to himself, as technical colleague, a city school-counselor; in Berlin, two, and in the cities of Stettin, Magdeburg,

Breslau, Danzig, one; the city commissaries are so far concerned in these matters, as they command the city finances, which of course gives them a very considerable influence.

In many cities, as particularly in Westphalia and the province of the Rhine, the administration consists of a special curatorium or school-commission, and in what regards its outside affairs, of attorneys, treasurers and directors. Within the province of the patronage council belongs all that concerns the outward prosperity of the institutions, the regulation of accounts, the preservation and increase of the buildings and utensils, the survey of inventories, and mostly of foundations, grants of benefices, especially to the free-school.

For this purpose it is in constant communication with the leaders of the school, receives from them reports and the respective accounts of all the details of school affairs, and is kept acquainted with the condition of school attendance, systems of instruction and public and final examinations, in which latter the members of the magistracy (*Gymnasiarchen*) or of the curatories are requested to be present. One of the most important duties devolving upon the so long established patronage-right, is the choice of directors and teachers; the welfare of the schools lies then entirely in the hands of the magistracy, and the correct exercise of this duty is more important than all regulations and school-laws, since everything depends on the capability of the teacher. As in later times the city councils were able to command better financial means than the crown, and the city commissaries showed themselves in readiness, by important grants, to further the prosperity of the higher schools, the latter of city patronage, received a powerful push, and begin even to take rank above those of the crown, of more ancient date, and better endowed. The choice of directors since 1810 is subject to royal confirmation, and that of teachers since 1817, to one from the State-council, but these would never be denied, except perhaps in times of political troubles or in cases of formal or moral irregularity. The regulation issued by the cabinet's order of November 10, 1862, in regard to the confirmation of directors and teachers, states that the provincial school-colleges should have to secure the approbation of the Minister of Instruction only for the appointment of higher teachers in gymnasiums, authorized progymnasiums and real-schools, and for the rectors of all institutions recognized in 1859 as higher citizen-schools; the appointment, installation and confirmation of all other teachers in the above named schools was left to the provincial councils. The directors of gymnasiums and real-schools of royal patronage were to be appointed as before by the king, and those of schools of city patronage needed his confirmation. In some schools, the parishes have a share in the patronage, and are represented by their pastors and church-members.

A royal *compatronat* is obtained on the ground of a city institution supported by contributions from the State. This circumstance was determined by a royal cabinet order of June 10, 1817, and is put into effect

in some institutions by royal compatronat commissaries; but it only relates to outside affairs, and in such a measure only as not to annul or diminish the rights of the patron, thus taking only into consideration cognizance of facts and counter-remarks, wherein necessarily the school-colleges have the determining voice.

D. MISCELLANEOUS.

A complete school-constitution is as yet wanting in Prussia. Until 1750 the patronages in all school-organizations were but little limited by the regulations of the State-councils. Frederic William I. was the first to lay claim upon the right of the State to issue binding regulations concerning school affairs, and to control the execution of the same in a more extended manner. The General Common Law (*Allgemeine Landrecht*), prepared by orders of Frederic II., and published in 1794, declared the public schools state institutions, and contained among others the following legitimate regulations:—1, All public schools and institutions of learning are under the supervision of the State. 2, To no one shall admission into a public school be refused on account of difference in religion. 3, Children of different persuasion can not be obliged to be present during the hours of religious instruction. 4, Schools and gymnasiums, in which the young are to be prepared for the higher sciences or arts, shall enjoy the rights of corporations. 5, These schools stand under the more immediate direction of the school-councils established by the State. 6, Where the appointment of teachers does not belong to certain persons or corporations, it is made by the State. 7, Without the knowledge and approbation of the councils appointed over the school-affairs of the province, no new teachers can be appointed nor any essential changes be made in the organization of the school-affairs and in the manner of instruction. 8, As inspectors, must be chosen persons of sufficient capacity, of good morals and sound judgment. 9, No native can leave school without a certificate signed by the teachers and school-inspectors. 10, The teachers in gymnasiums and other high-schools are considered as State officers. 11, The manner in which a child is to be educated is to be decided by the father; the latter must see that the child receive the necessary instruction in religion and such branches of education as his circumstances and position in society require. The transactions of the general school-conference (1849,) for the regulation of general forms regarding education, in which were assembled under the minister Von Ladenberg, and at the request of the professors of colleges, various directors and teachers of the gymnasiums and real-schools of Berlin, were published and presented much that was praiseworthy, together with useful hints, but they had no immediate practical result. The report of January 31, 1850, contains the following resolutions:—Art. 14, The Christian religion, in such organizations of the State as are in harmony with its religious practice, shall be made unalterably the basis of the religious liberty granted by Art. 12. Art. 15, The Evangelical or Roman Catholic Church, as well as every other religious community, shall regulate

and administer its own affairs independently, and shall remain in possession of the institutions, foundations and funds set apart for its religious worship, its educational affairs and charitable works. Art. 21, A sufficient number of public schools for the education of the young shall be provided for. Art. 22, To give instruction, or to found and direct institutions of learning, is open to every one, provided he can give to the proper authorities of the State sufficient proofs of good morals, scholarship and technical capacity. Art. 23, All public and private institutions of learning are under the supervision of councils organized by the State. Art. 26, A special law regulates all educational affairs. Art. 112, Until the law provided by Art. 26 takes effect, school and all educational affairs shall be governed by the existing legal regulations.

The execution of Art. 26, has thus far been deferred by the political uncertainties to which, in consequence of its new Constitution, the State has been subject to, and yet a complete instruction law, already prepared under the ministry of Bethmann-Hollweg, had been presented to the consideration of the Chamber of Deputies. A real practical want in school-affairs, or the absolute necessity of that law, had as yet not been sufficiently felt to urge its adoption, although in many respects, especially in the relations between the provincial school-counselors and the directors, more definite regulations had become necessary, especially to prevent that by too great a centralization and bureaucratic interference with the local administration of schools, obstacles might be set to the free and cheerful government of the directors, in the selection of whom such great care is taken.

II. TEACHERS.

The Magdeburg "order of visitation" (1563) required that "the magistrate, with the pastor and superintendent, should appoint the schoolmaster." This collateral right of city patronage has at all times been exercised in Prussia; it was only for the position of director in gymnasiums that the royal approbation was introduced in 1810. The service-instruction for the provincial consistories, Oct. 23, 1817, granted to these councils the right of appointment, advancement or confirmation of teachers in secondary-schools; for the directors and professors, the sanction of the Department had to be obtained. In consequence of the inquests made into the demagogic revolutionary movements of 1819, the filling and confirmations of the above named positions was forthwith transferred to the Department, and the election of directors (1836) became again subject to royal confirmation. The royal regulation of Dec. 9, 1842, determined then that the appointment, advancement and confirmation of teachers for gymnasiums, real-schools and higher burgher schools, be incumbent on the provincial school-board, but subject to the acceptance of the Minister of Public Instruction. The directors were to be elected by the king and respectively confirmed; as a general thing, the minister awaits, in regard to positions of royal patronage, the propositions of the school-collegium. The cabinet order of Nov. 10, 1862, established the following regulation,

at present in force:—"The acceptance of the minister is only to be secured by the provincial school-colleges in cases of superior teachers for gymnasiums, real-schools of the first order, and the authorized progymnasiums, as well as for the rectors of the latter; and, from the royal government, only for the superior teachers and rectors of the real-schools of the second order, and the institutions recognized as higher burgher-schools. In regard to the position of director, it remains the same as prescribed in the royal regulation of Dec. 9, 1842. The installation of the director takes place through a member of the royal supervision-council, and eventually through a royal comital commissary; the city patronage is, on this occasion, represented by deputies."

After the establishment of the literary commission for examination, a great stress was laid, in the appointment of teachers, in addition to their proper qualifications, upon their moral capacity and political integrity. The instruction of May 25, 1824, (by Altenstein,) stated that "in the appointment of teachers the invariable principle should be laid down, that public institutions do not reach their object by the mere literary culture of their pupils, or the prevention of corrupt and injurious sentiments or habits, but that whilst giving all proper attention to scientific culture, it was necessary also to inspire and awaken in the pupils sentiments of affection, fidelity and obedience towards the sovereign and the State, and that, for that reason, the situations of teachers should be particularly given to those that, in this last respect, deserve full confidence." The matter of moral requirements of teachers is still further treated in the circular of Feb. 6, 1847, (Eichhorn,) and in that of Dec. 20, 1848, (Von Ladenberg.) The latter says: "The teacher of a public school must, besides his literary attainments, possess also a moral culture, which may enable him to serve in every circumstance as an example to his pupils. His highest aim should be to remain faithful to his self-chosen vocation, to avoid in his instruction and in his intercourse with his pupils, all that would be calculated in any way to prevent their sound development, all that could not be conceived or properly appreciated by them, or any thing that could exercise a bad influence upon their religious sentiments, of whatever persuasion they might be, or on their ideas of what is noble and good." The circulars of Jan. 22 and June 12, 1851, (Von Raumer,) and of Jan. 2, 1863, required of the school-collegiums, in appointments and advancements, to examine into the private and professional career of the applicants, and to see especially that no blame be attached to their domestic and public life.

Among the formal requirements for an appointment are the release of military service, or the certificate of being acquitted from the same. Dissenters and Jews are excluded from public teacherships.

The regulation of Feb. 6, 1847, lays a special stress upon the election of the directors:—"The importance of the pedagogic power of a man," it says, "shows its full significance when the question comes to intrust the direction of a gymnasium to the right man. The necessary literary

culture in this case is easily found out, but it is much more difficult to obtain the proof that the future director possess not only a just estimate of the relations in life, but be also endowed with the proper sentiments and firmness of character, and such a personal appearance as will inspire respect and confidence, so as to command the general esteem of the corps of teachers, and by this and a consistent and steady government, may be enabled to train the young in all the sentiments of religion, in love of country, and a conscientious fidelity under all circumstances in life."

The formally-appointed teachers, immediately after receiving their appointment, take the oath; to those of institutions of royal patronage, it is administered by the Director, to those of city patronage, by the magistrate. The oath-formula of Feb. 12, 1850, was: "I — swear, by the almighty and all-knowing God, that, having been appointed to — by his royal majesty of Prussia, my most gracious sovereign, I, his subject, will in all things be faithful and obedient, and fulfill the duties of my office according to my conscience, and the best of my knowledge, as well as carefully observe the Constitution. So help me God." Every one is free to add to this oath any confirmatory formula which his religious sentiments may dictate. The technical and provisionally-accepted teachers are pledged by shaking of hands. The time of service, in regard to pension, dates generally from the day of taking the oath.

When the designation for a certain directorship has taken place, the *Colloquium pro rectorata* is held before the regular commission for examination, to inquire into the qualifications of the person designated, and see whether the candidate possess the degree of philosophical, pedagogic and literary culture necessary for the judicious supervision and direction of the whole establishment of a higher institution. The directors of the royal gymnasiums and real-schools are salaried by the king, those of city patronage receive in addition to their regular salary a gratification, through the Minister of Public Instruction. The appointment document reads as follows:—"We, —, by God's grace, king of Prussia, declare and announce hereby, that we have been pleased to appoint—as director —. This appointment is made in the confidence that he will remain invariably true to ourselves and our royal house, and will discharge the duties of the office intrusted to him in all its details, with zeal and regularity; the same will thereby enjoy all the rights connected with his present situation, as well as our highest protection." The appointing documents for institutions which do not come under royal patronage, contain in some parts of the country statements of a more special and detailed character concerning the duties and rights of the office; as, for example, in Königsberg (Prussia,) that the director can not engage in giving private lessons; at Stolpe, in Pomerania, that the director should make it the object of his usefulness to see to the Christian education and instruction of the pupils intrusted to him, basing the same upon the Word of God, such as it is defined in the Lutheran Catechism; at Nordhausen, that the director should give particular attention to the religious

education of the young, and see that the Word of God as contained in the Scriptures and repeated in the catechisms of the Evangelical Church, be duly presented to them. The obligatory duties and rights of the directors are contained in the documents of 1828 to 1856, given to the single provinces under the name of twelve *service instructions*, the purport of which agrees in general with all the rest. Since these instructions give the best representation of the importance which the State council attached to all educational affairs and their respective departments, the chief points of the general instructions concerning the object and import of the office and official position of the directors, will be here indicated, such as they are contained in the Pomeranian Instruction of May 1, 1829.

§ 2. "In order that the director or rector may enjoy free action in the discharge of his duties, and that the necessary unity may be obtained in his administration and supervision, it is declared that the whole school, with its several classes, its respective officers and pupils, come under his immediate authority." To that effect "he shall (a) enjoy in all his public relations as president and representative of a higher institution, all the respect and proper distinction which is due to the position. He is the mediator between the school and the parents and councils, and reports and directs all the transactions of the institution. Upon him devolves the responsibility to watch the spirit and tendency of the institution, and the obligation to give at all times full information of its condition, on all general and particular points." (b) "His relation towards the faculty is that of a superior and of a co-laborer in a common work." "He has to indicate to every teacher the sphere of his activity according to the general plan, and to observe his professional and moral life." "No teachers are allowed to refuse accepting or fulfilling any official duties he may see fit to lay upon them; yet, should they be overburdened, they can refer the case to the provincial school-collegium." "In the meetings of the board of teachers, which the director can call together as he thinks proper, the transactions are conducted by him, as president, and in cases of disagreement, his vote decides the majority. If from a certain decision the director should have cause to fear the institution would suffer, he must refer the case to the council; according to the Brandenburgian Instruction, his opinion still decides the case; the question at issue and the causes of disagreement being stated in his report." (c) "All pupils are subject to his supervision and discipline. To him are referred all cases provided for by the school laws, or whenever just objections are made against the course pursued by a teacher." "The lower officers and servants of the institution are under his special supervision and control." (d.) "He has the direction of all classes, and departments connected with the establishment."

§ 5. "The director shall, as often as the opportunity presents itself, confer with the parents or guardians about the progress of the pupils, to which the regular reports will give sufficient occasion. In regard to any

serious misdemeanor on the part of the pupils, he must inform those in charge of them."

§ 7. "He is bound on his own accord to acquaint the royal school-council of all that concerns the internal and outward condition of the school, and in all important circumstances, whether relating to the duties or rights of the faculty, to the order of instruction or discipline, or to any particular branch of the institution, he must consult the same."

The following is contained in the Brandenburgian Instruction :—

§ 9. "In the selection of regular class-professors, the director must exercise all possible care and judgment. According to the cabinet order of Oct. 24, 1837, the class-professors are designated by the school-collegiums, which regulation however rests practically upon their approbation of any candidate proposed by the director."

§ 10. "The censorship meetings must be held by the directors three or four times a year, at a fixed period and with due solemnity, and in the presence of all the professors of the institution."

§ 14. "In regard to the plan of instruction, it belongs still to the province of the director to design the plan of lessons for the scholastic year, and to assure himself regarding the carrying out of the same throughout all the classes, and to arrange the public and private examinations."

§ 15. "In the drawing up of the plan of instruction, the opinion of the several professors shall be taken into consideration, and their wishes, if reasonable, be duly regarded. If any one teacher has too great an amount of written exercises to correct in his department, this labor must be equalized in another direction by less laborious lessons. The plan of lessons must be laid before the provincial school-collegium in the first days of March and September, and no teacher is allowed to depart from it of his own accord or to introduce any other text-book than the one already adopted."

§ 16. "The director is bound to visit frequently the several classes of the institution in order to convince himself that the order of instruction is carried out, as well as to inspect the disciplinary condition of the same. It is also important that during the course he examine in turn the compositions of the pupils in their various classes."

§ 17. "Every transference of pupils from a lower to a higher class has to be preceded by an examination; the director himself decides upon his own responsibility, whether a scholar is ready to be transferred or not."

§ 18. "In regard to the public examinations, the director must see that in a certain space of years the teachers and classes take their turn." (The latter however is never practically carried out.)

§ 23. The director must so inquire into the morals, industry and progress of each pupil, as to be able at all times to give their parents and guardians due information of the same; he must also in the conferences of the meetings of the board of teachers, be so informed of every thing pertaining to the institution, as to give his advice and decide any case relating to school instruction and discipline. In the distribution of pre-

miums, he selects, together with the teachers, the most deserving from among the scholars, and decides all differences of opinion on that occasion."

§ 24. "The director has in general the introduction into office of any newly appointed teacher, and makes the announcement of the departure or death of any of the professors; if acquainted with a suitable person to succeed to the vacant position, he must call the attention of the patron to the same." (Practically the patron accedes always to the director's proposition.)

§ 27. "When temporary substitutes are needed, the director appoints from the other members of the board of teachers, and only in extraordinary cases, consolidates classes. Where a department needs a substitute for any length of time, an assistant teacher must be engaged.

In regard to rank, the directors, or as in some of the older gymnasiums they are still called, rectors of the gymnasiums or the real-schools of the first order, stand equal to the regular professors of universities, to the counselors of government and of courts of appeal; they belong officially to the fourth class in rank. Socially their position is much respected; those of age, part of whom have been the teachers of the highest officers of State, from the high consideration given in Prussia to school education, and by their former pupils generally, are treated with great esteem and filial regard.

The official labor of the director is to be mainly educational. It therefore requires his presence in school from the commencement of the first lesson in the morning to the close of the last in the afternoon. During the whole time of school he must employ himself with the teachers and scholars only; all his studies and official correspondence must be done outside of this time; it would be necessary that for this reason, the latter should be simplified as much as possible. However the speciality and exactness of Prussian administration overburdens in this particular beyond power the office of directors, particularly in the more frequented institutions of large cities. Correspondence to be held with local and provincial officers, periodical reports, tabulary reviews, statistical information, to which frequently is added the administration of educational funds, take up so much of their time out of school hours, that the most talented can not have the desired leisure for necessary progress in science. Beyond formularies and reports, more or less increased according to the option of the heads of the departments, in place of the yearly report of administration, into which the director received what appeared most noteworthy, and in which he was often required to explain a detailed subject more particularly, a triennial report has been substituted since 1859, in which, according to the Act of Aug. 6, 1868, besides the most detailed statistical information on the board of teachers, discipline, methods and means of instruction, many other things are required to be enlarged on.

In some of the provinces, general conferences take place of the directors of gymnasiums and real-schools of the first order, presided over by a

counselor of Instruction of the province. The first of these was in Westphalia in 1823; repeated at first every year, then every three years; the last, in 1863, was the fifteenth. In Pomerania, in 1861 and 1864, two such conferences met; in Prussia (province,) in 1831 a trial was made, and renewed with increasing success in 1835, 1841 and 1865. The several directors propose subjects for deliberation, from which the provincial school-board selects those for discussion, and appoints a disputant for each side. In this manner many didactic and pedagogic subjects have been thoroughly discussed, and by publishing the deliberations, the results of these conferences have become common property.

B. Class-professors and other teachers.—In order to effect greater uniformity in instruction, and to increase the moral influence of the older and more gifted teachers, who, by the kind and number of lessons they give in their respective classes, exercise much more influence on the young, class-professors were introduced in 1820, at the same time with the class system. The instruction by the royal consistory of the province of Brandenburg, Aug. 10th, 1820, contains the following principal regulations: "2, They superintend the scholars assigned to them and keep complete lists of their personal conduct. 3, The class-professor has to consider himself as requested by the parents or relatives of the scholar, to look after the general welfare of the young man in school. 4, He should never accept complaints about other teachers. 5, He should advise his new scholars in the purchase of the necessary books of instruction, and see that they prepare the requisite number of copy-books for writing and drawing, as well as blank-books for other lessons. 6, He should require that all copy-books be laid before him at least once a month, that he may also judge whether the student is not overloaded by the competition of too many tasks from different lessons given at one time. 7, He should privately take friendly advice with his colleagues as to the industry of his scholars, and heed their suggestions. 8, The same with regard to moral conduct. Here he should show himself a fatherly friend, but like a sensible parent not interfere with the disciplinary measures of another teacher. 9, He will be able better to effect all this by placing himself in accord with the parents or relatives of the scholar. 10, It is particularly expected from their devotion to the good cause, that from time to time they will visit at their residences those scholars whose parents do not reside in the place. 11, It is left for each director to add other regulations if circumstances demand."

The circular of the royal consistorium at Cologne of the 26th of February, 1824, has appended a few other regulations, of which the principal are: "11, Where monthly compositions have been introduced, the class-professor, from the lists submitted to him by the other teachers, shall prepare the principal class-report, and present the same, with the exercises, to the director. 12, It is specially recommended that he supervise the religious conduct and church-attendance of his pupils. 13, Where a disciplinary punishment is decreed either by a teacher who does not

instruct in the class, or by one of the class-teachers, which affects the whole or a greater part of the class, the matter should be laid before the class professor, who decides as far as the order of discipline gives him power, or refers it to the director.

The great influence of class-professorships has been amply verified since their introduction; the order of the cabinet for reorganization, of Oct. 24th, 1837, ascribes the success of all arrangements to this: "The more and the longer we succeed in finding for the difficult but influential position of class-professors, capable teachers, of a general scientific education, of true love and devotion for their profession, and of mature experience, who thoroughly have penetrated and mastered the subjects confided to them, and who understand how to select, with a clear and quick discernment, from their connection with other objects of study and with the general plan of instruction of a gymnasium in all branches, the means best adapted to the general development and efficient education of their pupils; who know how to distinguish between essentials and non-essentials, and who, finally, by the purity and dignity of their character, and their gentle yet decided deportment, are able to awaken in the classes confided to their care and training a lasting impression of the moral power which rules the destiny of man."

It was also in accordance with this ideal conception, that the instruction in religion of his class should, as much as possible, be confided to the class-professor.

The teachers of gymnasiums had, and in part still have, after the old custom, the titles of prorektor, conrektor, subrektor, subconrektor, baccalaureus, collaborator, coöperator collega, and in the inferior positions in many places, that of cantor and auditor, and in the ministerial order of March 17, 1840, the preservation of these titles for the three highest teachers was recommended. The title of *Oberlehrer* (higher or superior teacher,) after the introduction of the "order of examination of 1812," was usually adopted by all teachers who from their examination had obtained the qualification for the higher classes, but officially it was ascribed to those only who obtained it by express decree. The circular of Oct. 24th, 1837, published the resolution to ascribe the title of "*Oberlehrer*" as an encouragement to class-professors exclusively, and to revoke the existing distinction between "superior" and "inferior" teacher, in order to oppose the erroneous conception that the ability to instruct in the upper classes in itself bestows a higher dignity. By the decree of March 27th, 1845, a proportionate number of positions for "*Oberlehrer*" was established for each school, to which such teachers only should be appointed who by an *examen pro fac docendi* had proven their ability for instruction in the two higher classes. This decree, at first, could not be strictly carried out without severity against existing older teachers, well tried in practice; but by another circular, of Jan. 2d, 1863, it has been again established that for the vacant positions of "*Oberlehrer*" only such teachers should be proposed as have acquired the qualification to

give instructions in one of the main studies in the first class. Teachers who from their general mental capacity are fit for instructing in the upper classes, (but do not yet possess the formal qualification,) are urged to submit in time to a special examination. For the award of the title of "*Oberlehrer*" as a personal distinction, such teachers only shall be proposed, who by long management as class-professors have proved themselves able teachers and eminent instructors, and who have acquired considerable merit in matters of education. All other teachers are to be named "ordinary teachers."

A general instruction for the office of teachers does not exist.

The title of "professor" was formerly bestowed by the king; by cabinet order of Dec. 23d, 1842, the power to grant it was given to the Department of Instruction. It is to remain, however, a distinction rarely granted to those who possess the qualification for one of the main branches in a first class, and have not only proved themselves excellent teachers, but have made themselves favorably known in a scientific aspect. At some gymnasiums the title of professor is connected with a certain number of teacherships. According to rank, the professors of gymnasiums and of real-schools belong to the fifth class, equally with the extraordinary professors at universities. Sometimes the title of professor is bestowed on teachers of drawing and singing, when they have distinguished themselves by works of art.

To the desire to introduce an order of rank for the other teachers of higher schools, secretary Eichhorn (order of Nov. 7, 1846,) replied by declaring that it appears proper to withhold similar distinctions from the profession of teachers, and to allow the weight of scientific education and the labor towards the development of mental powers in youth, in connection with the personality of each one, alone to decide the dignity of the position. Herein lies the correct appreciation of the position of teachers in Prussia, that each one of them knows how to assume that honorable standing in society which is due him, according to his knowledge and personal dignity, in which he is willingly supported by the gratitude of a public greatly interested in the education of their children.

The number of hours of instruction is fixed for each teacher during the vacations; generally the director gives from twelve to sixteen, an *Oberlehrer* from twenty to twenty-two, an ordinary teacher twenty-two to twenty-four lessons; at the schools of the city of Berlin each teacher gives twenty lessons per week. If primary teachers instruct at higher schools, twenty-six to twenty-eight hours are permitted. The highest of these numbers shall be required of a teacher only, when the class is not largely frequented and no corrections of written lessons are connected with it.

Every teacher is obliged, without remuneration, to teach additional hours during a vacancy, except when the position is not again filled for a long time. He can not accept any other office to which pay is attached, nor an office in the civil administration of the city, without the consent

of the Department of Instruction. Teachers of the institutions under the patronage of the city can not be elected aldermen; they are required to accept a guardianship only of children of relatives or fellow teachers, and to this a consent is necessary. Before concluding marriage, they have to petition the governors of the respective province for his consent, and oblige themselves to contribute to the general fund for the support of widows. There is no limit prescribed to their giving private lessons; but the establishment of private institutions requires the consent of the local officers and of the Department.

The secret lists of conduct, which had been introduced early after the reorganization of the State, to be made out annually by the directors according to prescribed schedule, and returned by them to the provincial school department, and by the latter, after having been perfected, to the Department of Instruction, have been abolished by decree of July 31, 1848. These lists contained four divisions to mark personalities and official employment; three divisions to mark official conduct, moral behavior and private studies of the teachers. They have been undeservedly decried; for they gave to the director much more opportunity to recommend in an official way teachers of merit to the Department for distinction, than to take away from their merits. Since then a periodical report of administration gives the directors occasion to express their opinion on the qualification of a teacher; if it contains a censure, they have to apprise the teacher of it, and afford him an opportunity for justification. The royal decree of July 11, 1849, with regard to misdemeanors in office by officers other than judicial, was also applied to public teachers. Minister Von Ladenberg declared in a circular dated July 26th, 1849: "The productive working of the office of a teacher, rests essentially upon the whole spiritual and moral bearing of the individual and upon the respect it inspires in his scholars, as well as in their parents and guardians. The more important the educating element appears in the character of youth, the more the superintending authority should look upon this circumstance, and should not hesitate to consider, if needs there be, conduct outside of the school a misdemeanor in office." However, this decree made it a duty to protect a teacher against unjust and inimical accusations, as well as to give due consideration to the just complaints of those who confide to the teacher their holiest goods, the spiritual and moral welfare of their children. The code of discipline for all officers of the government, of July 21st, 1852, is considered to apply equally to all public teachers.

Leave of absence for a journey during the course of instruction can be granted by the directors for one week; the school department of the province can extend it to four weeks for a journey into foreign countries, and to six weeks within the State; the Ober president can grant six weeks' leave out of the State, and eight weeks within its boundaries; for any longer period the consent of the Minister of Instruction or of the king is required. During a leave of absence beyond four weeks, accord-

ing to order dated March 28th, 1808, officers shall draw only half salary, which however is but seldom practiced. In accordance with the cabinet order of June 15th, 1868, during a leave of absence, salary is paid in full for the first six weeks; half pay for four and a half months' longer, and no salary afterwards. In case of sickness no deduction is made. During a journey for purposes of science, the expenses for a deputy are deducted.

The same authority which commissions for a position is to receive also application for discharge, which shall only be refused when the general interests would suffer by acceptance. The teacher is not allowed to leave his post until arrangements have been made for a successor or for temporary occupation. The regular period for giving notice of discontinuance in office is generally six months, and to begin April 1st, or October 1st.

The salary of teachers, at the beginning of this century, was everywhere mostly very small and very rarely fixed in amount. The greater part of the receipts was derived from various fees and perquisites, some of them even degrading, of which the history of some schools furnishes ample evidence. Only since the reorganization of the State the government has continually labored to procure a fixed living salary for teachers, and particularly to abolish their dependence on the fees paid for instruction. For if by these a just equalization between labor and wages was effected, they very readily led to overcrowding of classes and other inconveniences, from which a school should be kept free. Pro-temporary officials receive a remuneration which can only exceptionally amount to the regular salary. The principal and most important emolument, a free residence, has been retained whenever it is derived from denotive funds or local appropriations. As a matter of course the director has a suitable dwelling in the institution, and where this is not the case, it is looked upon as an evil which should be remedied as soon as possible.

During a mobilization of the army, for those who are called into active service and who have their household with wife and child, a decrease in salary takes place, from the beginning of the month in which they are obliged to leave their homes, but only so far as their salary and military pay together passes beyond the amount of 800 *th.* per year. Salaries are paid every quarter of a year in advance; for accidental duties at the institution, remuneration is generally granted. During a journey in the interest of the service, and when a removal to another position takes place, mileage is paid proportionate to the office. Teachers who, without fault of theirs, find themselves in reduced circumstances, may have extraordinary assistance from the funds of the State, if their yearly income is not above 1000 *th.*, (thaler, 72 cents.)

The janitors of the school, who in accordance with a resolution of the Department of Oct. 12th, 1887, shall be selected from the military invalids entitled to maintenance in civil life, receive above their salary a dwelling-place in the institution, and materials for fuel and light. The collections taken up formerly among the students as a Christmas present, have been discontinued, and they receive instead a remuneration from the funds of the school.

The granting of pensions, up to the third decade of this century, was an act of royal favor; communities and corporations also exercised such acts of grace towards teachers no longer capable for duty, and often to a considerable amount. A law for the pensioning of teachers, after much deliberation and conferring with the provincial authorities, was enacted, May 28th, 1846, and received the royal approbation. According to it all teachers and officers of superior schools become entitled to a pension during life, if after a certain period in service they become incapable for duty not by their own fault, and if they were duly commissioned. If at an advanced age they are not absolutely incapable for duty, but unable to satisfy the requirements of their office, they are obliged, if the Department thinks proper, to pay an assistant appointed to aid them; however, there must be left for them a salary at least equal to the pension. The amount of pension is fixed by a scale; after fifteen years of service, four-sixteenths, after fifty years, twelve-sixteenths of their salary. The time of service is computed from the date of their taking the oath of office, and if they did not take such, from the day of their first entry into service. The trial year is not included, but the time passed in active military service is, and time of service before the enemy counts double. The fund for pensions is derived from yearly contributions of the salary, as introduced since January 1st, 1847; to the amount of one per cent. of 400 *th.*; one and one-fourth per cent. of 1000 *th.*; two per cent. of 2000 *th.*, and three per cent. of 8000 *th.*; moreover, one-twelfth of the whole salary must be paid in one installment.

The families of teachers who die in office, receive at the end of the month in which the death occurred, one quarter's salary; those of pensioned teachers that of one month. Every teacher commissioned for one of the higher schools is entitled and required to enter the "Institute for the support of widows," at Berlin, unless his age is too far advanced or ill health oppose his becoming a member. The amount insured must be at least one-fifth of the salary, and is not allowed to be above 500 *th.* In extraordinary cases, voluntary pensions are given to widows, generally only from 50 to 100 *th.*, and means for education in schools are granted for orphaned boys to their seventeenth year, and for girls to their fifteenth year, in monthly rates from one-half to two thalers. Many of these institutes possess considerable donations for widows and orphans.

III. REGULATIONS OF EXAMINATION OF TEACHERS.

The "Magdeburg Order of Visitation," (1568,) required the magistrate, with the consent of the resident pastor and superintendent, to appoint the public school-teacher. More minute regulations on an "examination" of teachers at the Latin and German schools were contained in the royal order of Sept. 30th, 1718, according to which they should be examined by the consistory or the general superintendent before being commissioned, and to those who gave satisfaction a testimonial should be given, and no one could be commissioned without it. Repeated instructions of 1750 and 1764 declared that no teacher should be engaged or promoted

without the approbation of the superior consistory, and the instruction for the superior school-collegium of Feb. 22d, 1787, ordered that a teacher should be appointed only on the ground of a testimonial from this authority. The candidate proposed for a vacant teachership was presented to the consistory or school-collegium of the province, which referred him to one of their members, generally to an experienced teacher. In this much depended on the character and learning of the latter, and these examinations lacked uniformity. Gedike, who, as a member of the superior school-collegium, was often charged with like examinations, gives a detailed sketch thereof in the programme of the gymnasiums of Frederickswerder of 1789 (collected writings on schools, II. pp. 90.) By the patrons of city schools, as long as teachers were mostly theologians, the evidence of their education for the ministerial office was generally deemed sufficient; likewise the recommendation of a distinguished scholar, or trial lessons, or the degree of Bachelor or Master of Arts given by a university, or the testimonials of their attendance at seminaries for theology, philology or pedagogy. But this custom proved more and more insufficient for the higher schools, since newly revived humanitarianism penetrated more deeply into them, and they no longer selected their teachers from among the candidates of theology, but from candidates who had been specially trained for higher teachership and proved more suitable. Thus, when the centralizing organization of the State extended also to the field of education, an examination of candidates for higher teachership, legal throughout the State, was ordered by the edict of July 12th, 1810, which at first was made by deputations of the Department of Public Instruction, and latterly by a special commission of examinations.

The regulations for examination had been drawn up by W. von Humboldt, Schleiermacher and Süvern. Of the motives, Humboldt had stated that such examinations are the only barrier that could be opposed to the abuse of the rights of patronage. It would honor the profession of teachers in the State, if every one who enters it had first to give evidence of his qualification. Fr. A. Wolf also declared himself in favor of not admitting any to teach at the secondary schools, though they had graduated at universities, unless they had been examined and authorized by the commission of examinations. The examination should consist in written theses, oral questioning and trial lessons. The commission could dispense with one of these. Those who, after presenting a dissertation in Latin and passing the regular oral examination at one of the faculties for philosophy of one of the State universities, had obtained the degree of Master of Arts, were not subject to further examination, only to a trial lesson. With members of seminaries for classic schools, the examination taken at their entrance by the director of the same, was sufficient. Distinguished foreigners called to professorships by the Prussian Department of Instruction were not subjected to any examination. The certificate given pointed out distinctly in what branches the candidate was well posted or weak, what proportion his skill in teaching held

to his knowledge, and the degree of his general qualification was indicated in the authority to teach in secondary-schools. The examination was called "*examen pro facultate docendi*." Those proposed for a permanent professorship, had to pass an *examen pro loco*, in which regard should be had only to the necessary knowledge and skill for the particular position. To dispense from examinations was the privilege of the Department for Public Instruction. These regulations took effect, Jan. 1st, 1813. The requirements made of candidates at first were trifling, and the taking effect of the regulations fell in a time when Mars was worshiped more than Minerva; but when, after 1815, studies could again be pursued undisturbedly, a continually increasing zeal for the study of philology and philosophy manifested itself, and gradually a class of teachers, scientifically educated, formed itself, the like of which could not be found easily at any other time, and towards which chief counselor Johannes Schulze largely contributed by encouraging learned publications and attaching promotion to the same; particularly in the selection of directors great weight was given to successful labor as an author. A regulation of the department of Aug. 21, 1824, called to the attention of the consistories the one-sidedness of philologic preparation, and demanded that examinations should be extended principally on logic and metaphysics, psychology and history of philosophy, history and theology; but that very one-sidedness had trained the best powers of teaching, and if the examination in philosophy had remained in the background, there was among the students of that time such great zeal for education in philosophy, that without special requirements at the examination, all studies were enlivened thereby, even in a more extensive and more liberal manner than is possible by the anxiety to pass an examination. The afore-mentioned circular, in calling upon the commission for examination, to pay strict regard to "thoroughness and quality of philosophy and the study thereof, to the end that the shallow and superficial philosophisms which in modern times compose wholly the science of philosophy, may give way to fundamental studies, and that philosophy may obtain again her honorable and useful position among the sciences, and that academic youth, instead of being bewildered and darkened by after-philosophy, may be conducted by thorough instruction in a genuine philosophical spirit, to a clear, correct and complete application of the powers of the mind," was particularly meant for the study of the philosophy of Hegel, and the early appointment of Hegel into the commission for examination coincided with it. The objections raised, by the commission of Berlin only, against the practicability of the order of the department in reference to philosophy, were replied to on Aug. 13th, 1865, that "the different branches of philosophy in which examination should be had, give to the examining person forthwith a distinct and concrete subject, by which to discover whether the candidate has mentally appropriated what he heard in the lectures on philosophy at the university." The observation of the commission, that no law did exist, and could not very well exist,

according to which one system of philosophy only should be studied by the young at the academy, was refused as trivial and not called for by the circular of the department.

The circular of Aug. 21st, 1824, directed further that each candidate for teachership, who had been examined, should pass another trial before a member of the consistory, in regard to his knowledge in theology. Of those who did not want to be qualified for instructing religion, they should particularly inquire whether they possess the knowledge of the Christian doctrines of faith and morality requisite for teachers at a gymnasium, while of those intending to become qualified for teaching religion, they should require sufficient knowledge in the exegesis of the Old and New Testaments, and in church history. In proposing for the office of professor or director, those who had a thorough education in theology should be principally favored.

In a corresponding manner it was ordered, under date of Sept. 2, 1826, that a Catholic clergyman, well schooled and of distinguished reputation, should be invited, with the approbation of the archiepiscopal see of Cologne, to examine Catholic candidates for teachership in their knowledge of religion, and to do this if possible at the place where the commission of education held their session.

Candidates for teachership, who desired to be engaged at the higher burgher schools only, should be admitted to the examination *pro facultate docendi*, though they had not passed the *triennium academicum*, or not frequented a university at all. But with regard to regular teachers of science at the higher burgher-schools, or schools of commerce, and technical or real-schools in larger cities, in which an education was obtained for the higher mechanics or for the commercial profession, principally in mathematics, the natural sciences, history and geography, German literature, technology and modern languages, it was ordained by instruction of March 29th, 1827, that their commission should depend on a previous well-passed examination in these branches.

The requirements for teachers of higher schools, changed and enlarged in the course of time, made necessary the preparation of new rules for examination, which are still extant, and which were composed by Joh. Schulze on the basis of opinions presented by the different commissions for examination. In these are distinguished the examination: 1, *pro facultate docendi*; 2, *pro loco*; 3, *pro ascensione*; 4, the *colloquium pro rectorata*. Subjects in examination are: 1, the German, Latin, Greek, French, and Hebrew languages; 2, mathematics, natural philosophy, history and geography, philosophy and pedagogy, theology. However, it should not be forbidden to any candidate to be examined in other languages and sciences, to which he had devoted himself, and which stood in connection with objects of instruction at secondary-schools. A main condition for admission was the complete academic triennium, and in 1841 a rule was added, that every one who desired to enter the service of the Prussian government must have studied at a Prussian university

during three semesters. Foreigners, in order to be admitted to the examinations, are required to present a special permit from the Department of Education; but from this, candidates from the Grand Duchy of Saxe-Coburg-Gotha are excepted since 1864.

According as the "*curriculum vita*" delivered by the candidate is found to be more or less favorable, two or three subjects for a treatise in writing are given him, with directions to finish the same after a certain fixed time (usually six months,) and to report the sources from which information was drawn for the composition. As a rule, one of these compositions must be in the Latin language; to candidates who intend to devote themselves exclusively to teaching mathematics and natural science at one of the higher burgher or real-schools, it is permitted to use the French language in place of the Latin. By circular of May 19, 1833, it was also permitted to give to candidates upon their application, lessons more difficult or more easy than were first required in the examination. Exempt from compositions in writing should be: (1,) doctors and masters of philosophy promoted at one of the inland universities, after a public defense in Latin of their inaugural dissertation, published in printed form; (2,) candidates of theology, who can produce a certificate from the theological commission of examination of having favorably passed the first examen for theologians. From the oral examination, doctors of philosophy were not exempt; on the contrary they had to be examined in all the principal branches of instruction, and particularly in those which are not included in the examination for doctor of philosophy.

According to the value of the written compositions, the subject for a trial-lesson, and the class in which it is to take place, are selected, and "the director and those members of the commission to whom the branches selected principally belong, are required to be present." In practice, however, it has been found that the director can not assist at all times, and consequently he is not always present.

By the oral examination is to be ascertained what knowledge the candidate possesses in philology, mathematics, history, natural sciences, theology and philosophy, and if sufficient for the purposes of teaching at secondary-schools; and he shall be examined so far in them as is necessary to judge correctly the extent of his knowledge. That part of the examination which refers to ancient (classical) philology, must be made in Latin. If the trial-lesson and oral examination should give a result different from that which the written compositions gave a right to expect, the candidate may be required to prepare another, under special surveillance and without any means of assistance. More than three candidates shall not be examined at the same time, and then only such as desire to become qualified for the same grade of schools. "The importance of the examination makes necessary the permanent presence of the director of the commission, and another member beside the one who examines the candidate."

In giving the "*facultas docendi*," three degrees are distinguished:

(1.) the unconditional, when the candidate, besides a sufficient, even if not perfectly developed capacity for teaching, is so far master of the subjects as to be able, after due preparation, to teach, (a) Latin and Greek and the German language, (b) mathematics and natural sciences, (c) history and geography, or (d) as according to later instructions of the Department, theology, and the Hebrew language, in one of the upper classes of a gymnasium successfully, and is so far acquainted with all other subjects as to be able to appreciate their relative importance to other branches of instruction and to influence beneficially the total education of the students." In a declaration of Aug. 9th, 1831, the Department pointed out "that the purpose of this regulation was to prevent for the future the total ignorance of candidates for teachership in any of the three essential branches of instruction in secondary-schools, as had hitherto not seldom been shown." Since the issue of the regulations of 1834 for the maturity examination* in leaving the gymnasium, such total ignorance is prevented, and the general examination of candidates appears no more necessary; however, the fear of it often divides the powers of students, who rather strive after the eminent in one branch, which is the more important, than after an *æqualis mediocritas*.

As qualification for instructing philology in the two upper classes, besides a perfect knowledge of Greek and Latin grammar, an extensive study of the classics of these two languages, in particular of those usually read in upper classes, and a familiarity with the actual value of philology and the most important means for its study, as well as correctness and fluency in lecturing Latin, are required. In the branches of philosophy a complete knowledge of details and minute penetration can not be expected; yet the examination must lead to the conviction that the candidate has studied these sciences.

The examination in German extends to grammar, the peculiar character and laws of the language, the historic development of the same, and the history of its literature. "Those who do not possess knowledge of the German language and literature, and general scientific knowledge enough to teach the German successfully in each class, even in the highest, can not receive the "unconditional *facultas docendi* for philology." The Department declared in rescript of Nov. 12th, 1831, that those who contended for that degree should combine the knowledge of antiquity with the study of the history of modern science.

In history and geography, beside a general knowledge thereof, the "study of the principal authors for any period of ancient, middle or modern history" was required. Moreover the candidate should "possess enough of philology, not only to make use of the Greek and Roman classics for his lectures, but also by the latter to contribute to the interpretation of the former; and he should have that command of expression in Latin, that he can deliver his lectures on ancient history in that lang-

* *Note.*—The final examination on leaving the gymnasium, which, if successfully passed, declares the student matured for the university, and entitles him to admittance.

uage." Qualification as teacher for the upper classes of real-schools may be obtained without a knowledge of the ancient languages, according to the order of April 6th, 1859. The ability of teachers and examiners to deliver a well connected lecture on history in Latin now disappearing almost altogether, this requirement has been overlooked at examinations. Also, geography is treated on generally by questions connected with the examination in history, so that an actual *facultas docendi* in this branch can rarely be said to have been established.

In mathematics, the candidate must prove that he has penetrated the higher parts of geometry, spherical analysis and higher mathematics, so far as to be able to make successful applications of these to astronomy and natural philosophy. A special decree of December 14, 1839, ordains that beside a general review of this science and its application to everyday phenomena, a more comprehensive and thorough knowledge of all its parts, including modern discoveries and late publications, as well as of the more important problems of chemistry and the ability to explain suitable problems in a mathematical way, should be required. This order also fitly demands, "that in order not to limit the thorough study of mathematics and the natural sciences by too great requirements, the conditional *facultas docendi* shall be given to candidates who can teach mathematics and the mathematical parts of natural philosophy in all classes, and to those who can instruct in the natural sciences in all classes, and mathematics in the lower and middle classes only.

In philosophy and pedagogy, beside an exact knowledge of these sciences and a critical appreciation of the different systems of instruction and education, it should be required that the candidates are able to explain, in a scientific manner, the principles of logic, metaphysics and psychology; and with a general knowledge of the history of philosophy and of its different systems according to their characteristic peculiarities, they should combine a familiar knowledge of the changes philosophy has experienced by Kant, and since his time.

2. The *conditional facultas docendi* can be obtained by (a) those who, though they have sufficient knowledge to teach in the two upper classes, yet in one or more branches do not satisfy the requirements which must be exacted of every teacher, obtain this degree under the condition that they supply those deficiencies, and they should not be admitted to the examination *pro loco* until there is reason to expect that their studies in the deficient branches have been perfected; (b) those who, in one or more of the chief subjects of instruction, possess only the knowledge required for middle or lower classes.

The second degree of teachership obtained great latitude by those regulations, and embraced candidates of the greatest learning and the most able capacities, as must frequently be found in limiting examination to certain branches of science, as well as those of great mediocrity who had not passed far beyond the maturity-examination. For this reason the instructions of Aug. 9th, 1831, made a discrimination between can-

didates who had been examined for teaching in the upper classes, and such as had been qualified for the lower classes only. To the first ones the regulations on examination *pro loco* are applied, but they are not to pass a second examination *pro facultate docendi*, since the trial-year will give the authorities ample opportunity to convince themselves how far the candidate has endeavored to supply the deficiencies appearing at the examination. Even after the trial-year, the authorities, by bestowing the necessary attention on the candidates in their district, could not fail of opportunities to obtain all information on that point. These instructions proved important and wholesome by freeing the most capable candidates from the obligation of a second examination in such branches of knowledge, the study of which could be superficial with them only, while it would draw them away from their proper field of excellence. The school-collegiums, it is true, had a task they could only perform to some extent through the organ of the respective directors, as under the office-like way of conducting the business of the collegium, there rarely was left time and opportunity for any of the members to make personal observations. The experience of the next years following the issue of these regulations showed in many cases unsatisfactory results of the examinations and many deficiencies, which partly had their cause in the regulations themselves, partly in their application by the examiners, in particular by some professors of universities, who made too high requirements on the younger teachers of gymnasiums, and partly, too, in the spirit of the times, which was more bent on realities and unfavorable to the study of philology. In the circular of Feb. 8d, 1838, to the Royal Commission for Examinations, the "superficial mediocrity which satisfies so many candidates for higher teachership in their vocation," has been opposed by increased demands, principally by allowing the qualification for *conditional facultas docendi* only to the candidates heretofore described under (a); but it was left to the discretion of the commission for examination to bestow the "*conditional facultas docendi*" on such candidates who in one or more of the principal branches of instruction possess only the knowledge required for the middle or lower classes, this permission to be limited to the lower classes exceptionally, when the candidates, with a security and clearness in fundamental knowledge, combined distinguished talent of explanation, an excellent skill in the treatment of the young, and a prepossessing appearance." At the same time the Department expressed a confident expectation that the commissions for examination would never lose sight of the fact, that the short course of three years at the university could only serve to collect a sufficient material; and therefore a complete, thorough, and in all parts finished knowledge, and a solid penetration into science, could not be required; much more they should see, if the candidates, besides a general knowledge, had actually laid the foundation in one of the principal branches, on which farther to build, and had an intelligent comprehension and spirited digest of the sciences chiefly cultivated by them at the

university. For able candidates of this class the Department in 1857 created a higher degree: conditional *facultas* for the middle classes.

On February 4th, 1838, a second circular to the school-collegiums was issued, in which the directors of gymnasiums were designated as suitable persons to advise young men in the upper classes, if not thought qualified for the profession, to desist from pursuing studies requisite for teachership, and to represent to abler ones the extent and difficulties of the object. But directors have seldom been in a situation to execute this charge. During the first ten years the proportion of candidates to vacant positions was unfavorable to the former, but soon after 1848 it changed, so that the want of teachers becoming more sensible, the Department of Instruction, under order of Oct. 16th, 1858, promised to assist students in the upper classes, in cases of poverty, if they felt a desire to devote themselves to the profession and were willing to pursue the necessary studies, beginning even at the time of their attendance at the gymnasium, and the directors were instructed to make proper application to the Department. It is not known whether recourse has ever been had to this measure. The general examination in religion and philosophy, as ordered by the cabinet order of Aug. 21st, 1824, was amended by rescript of March 3d, 1848, by requiring that the testimonials of candidates who had not passed this examination satisfactorily, should contain a provision that the candidate, before being definitely engaged, must prove in a second examination that he has acquired the requisite knowledge in the above sciences. It was chiefly intended thus to enlarge the knowledge of religion of future teachers, and to form teachers of religion not from theologians only. The same object was aimed at by a circular of the ministry of Von Raumer of Dec. 9, 1853, directed to the faculties of theology, requiring of them to introduce suitable lectures, which was done by some distinguished professors, but in spite of the desire repeatedly expressed under date of May 10th, 1865, they were never generally introduced by the faculties. The commission for examination, however, was instructed, from the year 1857, invariably to exact a report from the candidates for higher teachership, in how far and in what manner, during their academical studies, they had endeavored to increase and improve a scientific knowledge of religion.

By the above-named circular of Feb. 3d, 1838, theology and the Hebrew had been made the fourth principal part of examination; but by another cabinet order of Dec. 21st, 1841, candidates of theology, when they had obtained an excellent testimonial from the commission for examination in theology, should be considered qualified for teaching religion and the Hebrew language; and should be further examined only as to their ability and method of teaching; but in all other respects they should be subject to the same requirements as candidates for teachership. However, since it appeared desirable to gain men of sound education in theology as teachers of religion at secondary-schools, it was decreed by order of the Department, Aug. 10th, 1853, that candidates of theology,

who could produce the certificate of a well passed examination before the commission for theology, should be admitted to the examination *pro facultate docendi*. If they desire to acquire the qualification of "*unconditional fac. doc.*," they must satisfy all general conditions; the qualification for *conditional fac. doc.* may be imparted to them: 1, if by a trial lesson and oral examination, which is limited to didactic ability and the peculiar requirements of teaching in higher classes, they prove their ability to teach religion and the Hebrew in the first class of a gymnasium; and 2, if they prove their ability to teach (a) Latin, Greek and German, or (b) mathematics and natural science, in the third class of a gymnasium, or (c) either one of these subjects in the first class.

Catholic clergymen, according to rescript of March 26th, 1863, when they have been promoted by an inland university or by academic rule to the degree of doctor or licentiate of theology, are not subjected to an examination in theology in order to become qualified as teachers of religion, but their ability of teaching religion or the Hebrew in the different classes remains subject to trial by the commission of examination.

By ministerial rescript of Aug. 11th, 1854, members for the examination in French and English are added to the commissions. Candidates who wish to become qualified for teaching French or English, besides a thorough and fundamental knowledge of these languages and their literature, must respond to the requirements of general education demanded from all candidates. However, the rescript of the Department of May 28d, 1865, directs that the admission of teachers of elementary schools who have obtained the *fac. doc.* for those modern languages, as teachers of science at gymnasiums and real-schools, is generally not desirable.

For teachers of drawing at higher schools, to which heretofore teachers had been admitted without special selection, it was directed, April 2d, 1827, that only those should be proposed who were furnished with an attest of qualification by the Royal Academy of Arts, and that such should have preference among applicants. A circular of January 16th, 1828, directed the consistories and school-collegiums of the provinces to give to the Department an exact report on the qualification of each teacher of drawing at the gymnasiums in their province, on the manner and success of their instructions, and on their social position and relation. Since 1863 these candidates are required to submit to an examination by one of the royal academies of Art at Berlin, Königsberg or Dusseldorf.

As teacher of singing, no one can be engaged, since the year 1830, who has not given evidence of his ability to teach singing.

An examination for teachers of gymnastic exercises has been instituted by departmental rescript of March 29th, 1866, for which a commission, including a professor of anatomy, has been formed in Berlin. It takes place at the central institute for gymnastics (erected in 1851, and which proceeded from the central institute for the education of teachers of gymnastics by rescript of Feb. 6th;) under superintendence of the instructors. It was considered desirable that the instructions in gymnastic ex-

ercises should be confided to regular teachers of the schools only, and in order to educate such teachers, a course of six months, for eighteen pupils, was arranged in this institution, in which young teachers could take part without charge, and in particular cases were supplied with funds for their support during this time.

The incompleteness of the regulations for examinations of 1831, notwithstanding the many corrections and explanations, made a revision of the whole necessary, which was executed with the care peculiar to Prussian officials—the plan of a new order of regulations having been submitted to the provincial school-boards, to commissions of examination, and to experienced teachers, for their approbation.

Following the requirements of the law, a commission for examination was not easily constituted. In earlier times it was mostly composed of teachers, more recently counselors of instruction and professors of universities predominated. The first named undoubtedly understand best the necessary qualifications for the school, and require merits of a young teacher; but the limitations of their vocation renders it impossible for them to advance with the development of science, so as to be able to ascertain whether the period of study at the university has been profitably and practicably employed. The others, no longer familiar with schools, can not properly weigh their demands, and are apt to pass beyond the object of pedagogic preparation, or are led in preponderance by their own special scientific researches. The most suitable examiners are those who from the school teacher's chair have passed to that of the university.

IV. PREPARATION OF TEACHERS FOR SUPERIOR SCHOOLS.

Prior to this century, there were no special arrangements at universities for the education of teachers for secondary-schools, the first being the philological seminaries, the oldest of which is at the University of Halle. By order of the Elector in 1695 and 1697, a part of the revenues of the convent Hillersleben was used for the benefit of some students of other faculties than that of theology, who would devote themselves to the study of "*humanoria et elegantiores litteraturam*," and for those who intended to prepare themselves for teachership at secondary-schools, under the special supervision of Prof. Cellarius, who read every day a free lecture for them, until he died in 1707, when this arrangement ended.

A purely philological seminary was founded in 1787, by the influence of Fr. A. Wolf, which was the first to educate for the profession of teacher separate from theology, and in so far created an epoch in pedagogy. This seminary had twelve regular members, who had already attended a university one year, and were permitted to remain in the seminary for two years only. The exercises of the seminarists, in which a great many of the students of other faculties took part, consisted in interpretation of ancient authors, discussions partly on theses, partly on

compositions of the seminarists, and, for a time also, in the practice of teaching in the upper class of the Latin school of the orphan house at Halle. When this university was closed in 1806, Wolf went to Berlin; and on its reopening in 1808, Chr. Gottfr. Schuck obtained the directorship of the seminary, and in 1816 was associated with Seidler. After the new regulations of 1817, the object of "training skillful teachers for gymnasiums" was consistently followed up in all later regulations, and by the directors following, Mor. H. Ed. Meier and Bernardy, and exercises for acquiring a genuine style in Latin were particularly fostered. The separation into two divisions, which had been made in 1846 from personal motives, was annulled in 1857, when Bergh entered, after Meier's death.

The second seminary was founded by Professor Erfurt in Königsberg (1810.) The Department of Public Instruction agreed to his proposition for an association, under the name of a seminary, of young men who should, however, on account of want of sufficient preparation, be considered as first students only, from whom afterwards the regular members of the seminary might be selected. Schleiermacher, in voting on the instructions for this seminary, said very justly and well adapted for all times: "The first object is only to excite a love for the study of philology, and after this is awakened and formed, when an individual inclination is developed, free play must be given to it without any hesitation; but in every way we must prevent young men from limiting themselves to a narrower sphere and from finding their especial vocation therein." The department recommended exercises in writing and speaking of Latin and Greek; the latter M. Erfurdt desired to postpone at the beginning, but with the annual report of 1812, a "*disputatio de criticis artis difficultatibus*" in the Greek language could be presented, which the authorities in Berlin censured only for accents omitted. After M. Erfurdt, the directors of this seminary were Wald, Gotthold, Lobeck, Lehra.

In 1812, Bockh became founder and director of a similar institute in Berlin, who, with Buttmann, Lachmann, Martin Hertz, and Haupt, have presided over it till now.

The philological seminary at Greifswald, from a philological association, became (1822) a public institution, at first conducted by Henry Meier alone, assisted by Schomann, who subsequently became director; assisted successively by Martin Hertz, Urlichs, and Ufener.

The seminary at Breslau was established in 1812; the two first directors were Gottl. Schneider and Heindorf, who were followed by Fr. Passow, Chr. Schneider, Ritschl, Ambrosch, Haase, the latter since 1856 in connection with Rossbach.

The philological seminary at Bonn was founded in 1819. The directors were Nake and Heinrich, under whom the attendance increased so considerably, that in 1826 it counted ten regular members, twenty-seven extraordinary, and forty-five visiting members. Welcker, who, after the death of Heinrich, became co-director, fostered the study of ancient art

in connection with that of ancient literature, but the interest among the students abated so much, that in 1841 there were only eight regular, ten extraordinary, and sixteen visiting members. After Ritschl was called to the position of *Nake* in 1839, the interest gradually increased again, so that in 1861 the number of members was eighty, and in 1864, eighty-eight. Eighteen years after the resignation of Welcker, in 1861, O. Jahn was appointed second director. From this seminary a great many excellent scholars have proceeded, who had creditably begun their career at universities and gymnasiums, and it was a matter of universal regret that the difficulties in the year 1865, should have induced so distinguished a professor as Ritschl to leave the service of the Prussian State.

In 1824, a philological and pedagogic seminary was connected with the theological and philosophical faculty at Münster, for the purpose of training candidates for efficient teachers at gymnasiums; its directors were Nadermann, Esser, Grauert, and at present, Deycks and Winieroski.

All exercises in these seminaries were arranged after the course at the seminary of Halle; for regular members, subsidies of forty thalers per year generally, with participation in the studies gratis, are allowed.

The first proposition for the establishment of a seminary for history, for the purpose of giving to a number of students a thorough education in history and enable them to take charge of instruction in this department was made in 1824 by Professor Menzel of Breslau; but the institute was not erected till 1843, when premiums of two hundred thalers were granted. Since 1852, Professor Ropell presided over it, assisted from 1863 by Professor Junkerman, a Catholic, so that a division of instruction according to religious confessions was introduced.

In Königsberg, as early as 1832, a like seminary, with a grant of two hundred thalers, had been established, the first director of which, Prof. Dr. Schubert, still presides; and one at Griefswald (1863) by Prof. Dr. A. Schafer, with yearly premiums of fifty thalers. The seminary founded at Bonn in 1868, with premium of three hundred thalers, is divided into two separate branches, independent of each other, according to its two-fold object: 1, to introduce researches in history; 2, to prepare future teachers of history for gymnasiums. The direction, in order to provide for ecclesiastical preferences, has been given to two professors, Von Sybel, Protestant, and Kampschulte, Catholic.

Beyond these public institutions, the lectures on history of distinguished professors at the universities of Berlin and Halle, though at first instituted for scientific objects only, have aided very much in training eminent teachers of history for higher schools, particularly those by Leopold von Ranke, and more recently by Droysen, by whom a good number of the best teachers in this branch have been educated.

The first seminary for mathematics and natural philosophy, at Königsberg, adopted, in 1834, preliminary statutes, and obtained as directors, Professors Neuman and Jacobi; and in 1839, by royal order, its subsidy was increased from one hundred and fifty to three hundred and fifty tha-

lers. Since 1843, Prof. Richelot took part in its instruction. At Halle, a seminary for mathematics and natural philosophy was begun in 1838, through the energy of Prof. Kæmtz and Prof. Schncke, called thither from Königsberg. Through the influence of Prof. St Schweigger, it was, in 1840, extended to all the natural sciences, and consists at present of seven divisions with eight professors. The seminary for mathematics at Berlin was founded in 1861; admittance into it follows upon an oral examination by the directors, and a written trial-composition. The directors are Kummer and Weierstrass; its subsidy, four hundred thalers.

In order to supply teachers of natural history for secondary-schools, and to increase generally the study of the natural sciences, the "seminary for natural sciences" at Bonn was founded in 1825 for fifteen to twenty regular members; its director was Nees von Esenbeck, and each of the four divisions received a sub-director; afterwards the directorship changed according to election by the members. In 1830, the department directed that a testimonial of qualification should be given to the seminarists upon their leaving, which should relieve them of the examination by the commissions. This regulation was, however, changed in 1845, to giving such a certificate on the basis of an examination. For the furtherance of this institute, the department, in 1831, instructed the provincial collegiums of the eastern provinces to recommend attendance at this seminary to such students, leaving the gymnasiums, who had shown special talents for the study of natural science.

B. Pedagogic Seminaries.—It was of great importance to give to young men who had acquired good knowledge at the universities after they had passed their examination, an opportunity practically to learn the art of teaching. Before the time of Fr. Gedike, the preparation of teachers for secondary-schools was left to chance; but this eminent educator, principally through his own influence, received, Oct. 9th, 1787, the first charge to open a "royal institution of teachers for learned schools," which obtained its constitution under the name of a seminary, Nov. 18, 1788. The first five students received a stipend of one hundred and fifty thalers each, and the seminary was connected with the Frederic Werder gymnasium at Berlin, then under the directorship of Gedike. Its members were considered regular teachers of the gymnasium, and each was charged with ten lessons per week in one of its classes, and moreover they should be ready to take the place of other teachers when the director required them, to make the corrections of written lessons, to prepare testimonials for scholars, and for other practical services. They should be present as visitors during the instructions given by the director or by other teachers, or by some one from among themselves, should associate much with one another in free exchange of observations and opinions, and be under the superintendence of the director and of three teachers. That they might have practice in pedagogic moral treatment of single students, one who needed special treatment was from time to time placed under their care. For their further theoretical education,

they had to prepare a composition on some subject of pedagogy suggested by their own experience, to be submitted to the director, and read and discussed in a pedagogic society established by them. Moreover, the members met once every month in a philological society, over which the director presided. A collection of books, expressly for the members, was procured, for the increase of which, forty thalers per year were set apart. With Gedike, the seminary in 1793 passed over to the gymnasium at the Gray Convent in Berlin, and under Bellermann I. (since 1804,) one member was ceded to the Fred. Werder gymnasium, after most of the seminarists had become in fact assistant teachers. In 1812, the eight members were alternately distributed among the four German gymnasiums, and the directorship, which according to the new instructions of Aug. 26th, 1812, was to be entirely independent of the directors of gymnasiums at Berlin, passed at first over to Solger, professor of the university, who was also a member of the scientific deputation of Berlin, and after his death in 1819, to Prof. Bockh, who was at its head in 1866. Since 1812, the practical pedagogic training of the members has in reality devolved solely on the successive directors of the gymnasiums. The increase in the demand for teachers after 1815 made the execution of the regulations for instruction impracticable; the seminarists, who were permitted to remain four years only at the seminary, if they did not obtain sooner a position as regular teachers, were mostly engaged as assistant teachers at the same or another gymnasium, sometimes at several, and the six lessons per week laid down for them, especially on account of the large demand for teachers after 1848, were often considerably increased; also the rule, to give their instruction in presence of a regular teacher of the gymnasium, and to fill but two lessons in the lower classes, could not be carried out. A decree of the department of Dec. 13th, 1863, made an end to overtasking seminarists with hours of teaching, as contrary to law and to the regular purpose of the seminary; as a maximum, twelve lessons were allowed, for which, however, if not regular lessons of practice for the seminarists, but taken for a time from the regular teachers of the school, they should be properly remunerated. By this, the situation of the seminarists has been improved.

A second pedagogic seminary was established (1804) in Stettin, "for the education of teachers of learned, middle-class, and inferior burgher-schools of the whole of Pomerania," by the aid of the property of the former "St. Mary's Home;" but soon the seminary was limited to eight candidates for higher teachership, who at the same time were assistant teachers of the gymnasium. Professor G. W. Bartholdy was its director up to 1815; since then the directors of the gymnasium have also presided over the seminary, by which, also, in consequence of the instructions made last, July 8d, 1844, the number of members of this institute decreased to four, and a similar arrangement to the original one of the Berlin seminary was effected, which is certainly more practical.

The seminary of Breslau, in the main arranged after the same prin-

ciples, was established in 1813, and stands since 1858, every two years alternately, under the directorship of the Protestant and Catholic provincial school-board. Upon request of the director of the seminary, the commission for examination gives the lessons for the seminarists, and has them reviewed by their members.

The pedagogic seminary at Halle has gradually formed itself out of the theological seminary connected with that university; but has only since 1829 become a separate institute, for it was placed under the supervision of the commission of examinations, and received a director of its own, who must be a practical schoolman, and always professor of the faculty for theology or philosophy. Thus the seminary, as a theologic pedagogium, remained a special division of the seminary belonging to the faculty of theology of the University of Halle-Wittenberg, and according to the new regulation of 1835, the direction should be given to a regular or extraordinary professor of theology, which was again confirmed by rescript of Feb. 18th, 1856. There is a considerable distinction between this seminary and others in this, that its twelve members are divided into a first and second class, and principally students are admitted, who have been one and a half years at the university; qualified candidates of teachership, with good testimonials, can also find admittance. The seminarists are obliged regularly to attend the course of pedagogic lectures of the director, and to present one composition of a pedagogic character every semester. Practical exercises consist principally in teaching lessons, in a branch previously selected, to scholars whom the director collects for this purpose in a class-room, before auditors, and after their withdrawal, a criticism on the teaching by the other members and finally by the director, takes place. Further to acquire self-reliance, the seminarists give lessons in one of the classes of the Francké Institute. The period of membership has been fixed for students at two years, for candidates of teachership at one year; the stipends for members (first class, fifty thalers, second class, thirty thalers) are less than at other seminaries. The entire arrangement approaches that of seminaries for public school teachers; yet at the present time the condition of the students has again found more liberal consideration.

The province of Saxony has moreover a very important institute for the education of teachers, in the "Convict," for six candidates of theology, established in 1856 with the Pedagogium of the Convent of U. L. F. at Magdeburg; the candidates admitted in it must have acquired the qualification *pro licentia concionandi*, with the predicate at least of "good," and must intend to devote themselves to teaching at secondary-schools for a number of years or for life. The object of the "Convict" is, by a scientific and practical training to educate teachers of religion for high-schools, who are able to instruct in other branches of science as regular members of the board of teachers.

C. The pedagogic trial-year.—The arrangements for the education of teachers for higher schools soon proved insufficient for the existing de-

mand. This demand for graduated teachers for gymnasiums, towards the middle of the third decade of our century, became so large, that every candidate for higher teachership, immediately after passing the examination, sometimes on the ground of his testimonial only, received a regular appointment in the province, even as class-professors. At this time the superior officers of the Department of Instruction had remarked that one single trial-lesson (as prescribed by the regulations) was not sufficient to enable them to obtain such a knowledge of the practical usefulness and talent for teaching of a candidate, as was desirable and necessary to a just estimation of those who applied for the position of teacher. For this reason, the Department, Sept. 24th, 1826, caused the introduction of a pedagogic trial-year, according to which, all candidates, qualified by attainments, should hereafter, for at least one year, practically engage in teaching at a secondary school, and thus prove their fitness, before they could be regularly commissioned as teachers of science. The choice of the school should be left to the candidate, but in no school more than two at a time should be admitted, and no candidate be charged with more than eight lessons per week, and in extraordinary cases, to fill a temporary vacancy, at the highest with six lessons more; these lessons were generally given without any remuneration. The selection of classes, in which the candidates should give their lessons for six months or for the year, was reserved to the directors, and these, as well as the class professors, should frequently attend the instructions by the candidates, and amicably discuss their manner of teaching with them. In order to acquaint themselves with the organism of the entire school, and to gain a view of the art of teaching of experienced teachers, the candidates were expected, during the first months of their trial-year, to visit the different classes during those hours of the day when they themselves were not engaged with teaching, and that they might practice the art of pedagogic discipline, some rude, idle, or ill behaved scholars of the classes in which they were to teach, should from time to time be placed under their special supervision. In all other respects the candidates should be considered regular teachers, and at the expiration of the trial-year should receive a testimonial on the skill in teaching they had acquired, and on their practical usefulness, signed by the director and the class-professors. Since 1832, the candidates receive a testimonial as to the trial-year only, which, since 1844, is signed by the director alone; a detailed certificate is sent to the Department of Education, and since 1858 to the school-collegium of the province.

This arrangement, which coincided with the period when higher schools were amply provided with teachers, gave a desirable support to qualified candidates, and at the same time the opportunity for practice in their profession, but to directors it gave an additional duty, and to the schools a burden often injurious. The directors, already constantly engaged, with few exceptions did not trouble themselves much about these passing pedagogues, and the class-professors not at all; thus the

trial-year was beneficial only as a process of refining by which talented teachers were separated from incapable ones.

Minister von Eichhorn issued, April 8d, 1842, a new instruction on the trial-year, according to which "the candidate should at first, by visiting classes, conversing with directors, class-professors and other teachers, gain a view of the organization of the school; 2, for a long time visit those classes in which he is to teach, and make himself familiar with the manner of teaching of him whose place he is to take, and with the progress of the pupils; 3, in the selection of subjects for teaching, regard must be had chiefly to his testimonial; 4, he should not be employed all the year in the same class, but an opportunity must be given him to try his ability in other and higher classes, even if only in shorter lessons; 5, the teachers, represented by the candidate, must consider themselves all along as the proper teachers of the subject or the class, and in the commencement be present in all the lessons given by the candidate, and at the end of a lesson make suitable suggestions to him; and as soon as he can be intrusted with the sole care of the class, attend his lessons at least once a week."

Wherever this arrangement was executed with vigilance, it operated most favorably, and while under the previous rules part of the candidates were lost to the profession, by these latter every one, with few exceptions, became a well-experienced schoolman. The scholars were not given over any longer to unsafe experiments of new comers, and the young teacher gradually acquired the necessary authority, under the patronage of his guide, and the confidence and method, so important to independent teaching. A great number of teachers, some of whom are now directors, have thus qualified themselves for the profession. The superabundance of candidates for higher teachership until 1848, rendered the execution of this measure easy, as each candidate estimated it a special favor to be permitted to begin his trial-year directly after the examination, and proved grateful for the permission to teach longer without any remuneration until regularly commissioned. For foreign candidates, it was rendered very difficult to be employed at secondary-schools; the circular of May 28th, 1851, made the examination and trial-year depending upon the consent of the Department of Instruction, and circular of January 27th, 1852, prescribed that after examination and trial-year, none should be engaged at secondary-schools except by permission of the department. But after this time a great change took place in the relations of teachers in Prussia. In many places great zeal was manifested for establishing and extending schools; many teachers resigned on account of age or because they had committed themselves in politics; the favorable prospects for young men in industrial pursuits took away many disciples from the profession of teacher. Thus it happened that the candidates for teachership, not long before in abundance, were in a few years all engaged; so that not only examined candidates were employed as regular teachers, with salary and a full number of lessons, but non-

examined also, under the promise, it is true, to pass their examination within a year, which was however not exacted on account of the want of teachers. This want was in part remedied by facilitating the employment of foreign candidates; and in consequence of the cabinet order of Jan. 27th, 1862, a great many from the North-German States filled vacant positions, so that the employment of non-examined candidates was rarely tolerated, while that of candidates on trial was greatly favored, it being ruled by rescript of Feb. 14th, that they should not teach any longer beyond the lessons for their practice, without receiving compensation, but should have a competent salary, and that all regulations with regard to their exercises in teaching, under supervision and information, should be strictly adhered to.

The trial-year may be held at gymnasiums and real-schools, but only exceptionally at progymnasiums and secondary burgher-schools. The members of seminaries for high-schools are dispensed from it. In fixing the amount for pension, it is not counted as a year of service.

Assistance for travel to foreign countries is only given by the French gymnasium of Berlin, which has two stipends for the education of candidates in the French language.

V. PLAN OF INSTRUCTIONS.

The plan of instructions of Prussian gymnasiums, as elsewhere, has, in the course of time, been subject to many modifications, and we can here only enter nearer upon that by which a uniform order of instruction has gradually been effected.

The requirement for maturity-examination necessarily prepared the way to uniformity in the plan of instructions preparing for it. The Department for Public Instruction concluded, in 1810 at first, to introduce a general plan of instruction, which the Catholic schools should also adopt, and by gradually executing this plan, a ministerial rescript of Nov. 12th, 1812, prescribed that all classical schools which possessed the privilege of qualifying for the university, should adopt the name of gymnasium. Prof. Süvern was intrusted with arranging a general plan of instruction; this plan, submitted to Fr. A. Wolf for his opinion, was modified at different times, then fixed upon to be, in its main points, a guide in the administration of schools, but never published or brought into use generally. The order of instruction of the different gymnasiums, from the individuality of these schools and their directors, maintained great variety for a much longer period, and it was thought a special proof of skill of the directors, in which manner the plan of instruction was laid out by them, wherein they had to give to local circumstances, to the demands of the times, to the need of the institute, to the capacity of the powers for teaching, that consideration which alone, with a just and sensible direction, can be beneficial to schools.

Great credit is due to Bernhardi, the director of the Frederic Werder gymnasium of Berlin, by the publication, in 1812, of the plan of instruc-

tion of the programme for 1812, the second chapter (part one) of which treats on the organization and subjects of instruction. In this he thus speaks of the degrees of instruction in the gymnasium: "Though the gymnasium is a school for classics, and its organization of instruction must tend to this object from the lowest class, yet consideration must be had, in the present condition of school matters, that those also who intend to become tradesmen, mechanics and artists, in the widest sense of these words, should be thoroughly and completely prepared for such vocations. For this purpose, all of the eight classes should be divided into three degrees of education, of which the third and lowest had for its object the practical education for the lower civil vocations; the second more chiefly for the higher civil professions, and the first to impart the required knowledge to future students of the learned professions." On this principle he based the organization of his school, and under the increasing influence he acquired over the whole direction of matters of instruction, his plan became the model for all Prussian gymnasiums.

The same principles pervaded the order of instructions of 1816, (unpublished,) according to which, gymnasiums have the object "not only to assist their pupils in acquiring that measure of classical and scientific education necessary to understand and profit from systematic lectures on the sciences at universities, but also to furnish them with the ideas and sentiments of the highest individual culture. The lower classes give to those also who are not destined for the learned professions, an opportunity to prepare themselves for other vocations which require more knowledge than can be furnished by elementary schools and inferior burgher-schools."

Every gymnasium, after the plan of Bernhardi, was to consist of six classes, with three degrees of instruction; in each of the lower classes, sixth, fifth and fourth, the scholars should spend one year; in the middle classes, third and second, two years; in the first class, three years; that is, at an average, from the ninth to the nineteenth year. The branches of instruction were thus distributed: Latin in the sixth and fifth, each six lessons, in the other classes, eight lessons; Greek in the fourth and third, five lessons each, second and first, seven lessons; German in the sixth and fifth, each six lessons, upper classes, four lessons; mathematics, six lessons; natural science and religion, each two lessons; history and geography, each three lessons; drawing, obligatory to the third, and penmanship, obligatory to the fifth; the total number of lessons to be thirty-two, outside of those for Hebrew, singing and gymnastic exercises. To the French language no place was given, "because the general object of teaching languages in schools was completely attained by the three classical mother languages of Europe, the Greek, Roman, and German." This exclusion was attributable in a great degree to the then existing hatred of the French, through which also parents asked to have their children excused from learning a language which in fact was never struck from the plan of instruction, and remains to this day part of the maturity-examination. The increase of lessons in German is also

connected with the demand of the time; a revived national spirit and the increased study of ancient German literature were infused into gymnasiums. Remarkable is this expression: "The Prussian State is Christian; therefore Christian must be all religious instruction in its public schools, and no room should be given to universal religion."

Instruction in gymnastics, "so important to national education, since the harmonious development of mind and body is eminently necessary for every one, should not be ignored at any school." Notwithstanding this announcement, the reactionary movement of 1819 banished gymnastics for a long period from all public institutions.

Though the plan of instruction mentioned above, afforded but little scope to ancient classical languages, and attributed more importance to modern science, yet not enough had been done to satisfy the constantly increasing utilitarianism, and demand for modern languages, particularly for the English, and wherever burgher or real-schools, beside the gymnasium, did not exist, many concessions had to be made to the pressure of modern ideas by dispensations from the study of the Greek language, or to increased demand in the study of real-science, not rarely requiring the extreme efforts of the pupils. Beyond solitary attacks in periodicals and newspapers against the gymnasiums, the provincial board of Silesia and Prussia petitioned repeatedly for modifications in the plan of instruction of gymnasiums, and in favor of converting some of them into secondary burgher-schools. The Diet of Silesia, Dec. 80th, 1831, in the order of prorogation, received a memorandum of the Department for Instruction, on the studies at gymnasiums of young men who did not intend to enter one of the learned professions. In this the significance of every branch of instruction is pointed out. "It is a proposition void of all foundation," it says in the introduction, "that instructions at gymnasiums should be calculated for a course at universities only, and not in aid of the development of every mental faculty. The subjects taught at gymnasiums, in the order and proportion of progress in the different classes, form a foundation to all superior culture of men, and the experience of centuries, the opinion of experts, speak in favor of the usefulness of all studies, within the sphere of instruction of gymnasiums, for the development and invigoration of the mind and the abilities of youth.

An article written by Lorinser, counselor of the medical faculty, noticed beyond its merits, for exaggerations and superficialities, called forth a great many replies; and each teacher of a gymnasium was requested to give his opinion in writing, and it gave occasion to the circular of Oct. 24th, 1837, prepared by Joh. Schulze. From all reports of the provincial school boards, the department had satisfactory proof that the condition of the health of youth at the gymnasiums was generally entirely satisfactory, and that no reason existed for the accusations of Lorinser. However, the dispute led to the following general plan of instruction:

GENERAL PLAN OF STUDY FOR GYMNASIUMS IN 1837.

SUBJECTS.	Hours per week for each class.					
	VI.	V.	IV.	III.	II.	I.
Latin,	10	10	10	10	10	8
Greek,			6	6	6	6
German,	4	4	2	2	2	2
French,				2	2	2
Religion,	2	2	2	2	2	2
Mathematics,			3	3	4	4
Arithmetic and Plane Geometry,	4	4				
Natural Philosophy,					1	2
Introduction of Philosophy,						2
History and Geography,	3	3	2	3	3	2
Natural History,	2	2	2	2		
Drawing,	2	2	2			
Penmanship,	3	3	1			
Singing,	2	2	2	2		
	32	32	32	32	30	30
Hebrew,					2	2

In accordance with this general table, a yearly plan should be prepared at each gymnasium, based on considerations of the peculiar wants and fluctuating demands of each class, to which should be added an exact description of the limits to be attained by each class in every branch. "If herein, in regard to the plan of instruction of the different gymnasiums, a free motion is permitted within the limits of general regulations, the number of lessons in religion, the languages and antiquities, and in mathematics, should not be diminished, as these are eminently fit, by their vivid connection, to realize the purposes of instruction, and therefore the position they occupy, as chief parts in the organization, must not be removed." It was from a just appreciation of the demands of the time, that a certain degree of freedom in the selection of what they considered necessary was left to the directors. Commencing the study of French in the third class made instructions in this language almost fruitless; for teaching natural history, teachers were wanting; two lessons in history in class I. was not enough, if this important branch was to be treated thoroughly in the highest class; so the school-board concluded to begin the study of French in the fifth class, to add the time for natural history to geography, to increase the hours of instruction in the second and first class to thirty-two, and to make other changes as the directors advised, which from the vigilant supervision of the board did not prove injurious. On the basis of the experience of the last twenty years, and of the changed demands in instruction, a modified plan was devised, by ministerial rescript of January 7th, 1856, which was intended to reduce the hours and concentrate the subjects of instruction:

STUDY PLAN ADOPTED JAN. 7, 1856.

SUBJECTS.	Hours per week for each class.					
	VI.	V.	IV.	III.	II.	I.
Religion,	3	3	2	2	2	2
German,	2	2	2	2	2	3
Latin,	10	10	10	10	10	8
Greek,			6	6	6	6
French,		8	2	2	2	2
History and Geography,	2	2	3	3	3	3
Mathematics and Arithmetic,	4	3	3	3	4	4
Natural Philosophy,					1	2
Natural History,	(2)	(2)		2		
Drawing,	2	2	2			
Penmanship,	3	3				
	28	30	30	30	30	30

Admittance to class VI., according to regulations, takes place after the age of nine years; fluent reading of German, in German and Latin type, a legible handwriting, facility in writing from dictation, without great mistakes, and knowledge of the principles of arithmetic, are required. The length of the course in each class remained as fixed by circular of Oct. 24th, 1837: for the sixth, fifth, fourth, one year each, for the third, second, first, two years each, for the third and second, according to progress, a shorter period.

In the three upper classes of a gymnasium they read: Cæsar, Curtius, Livy, Cicero, Quintilian, Sallust, Tacitus; of poets, Ovid, Virgil and Horace; Cæsar and Curtius are read in full; of the others, selections suitable for scholars, so that in a certain period the same parts must be reviewed; but preference on the part of the teacher, for greater variety in the reading matter, must not withdraw any thing suitable from the scholars. Seldom are two prose writers read in one class, and never two poets. Special editions for schools are not prescribed; the well-meant attempt to prescribe the same edition for all scholars of one class will be defeated by the prejudice of parents. The editions of Weidmann and Taubner are most in use and are recommended.

In the first class, sometimes in the upper part of the second class, free Latin compositions are occasionally required, four to six within six months. Frequent exercises in Latin were required in the beginning of this century, and lectures on ancient history were then delivered in this language, so that on certain days only Latin was spoken at school. Coincident with the demand for the modern studies and for practical interpretation of ancient authors, lectures in Latin gradually diminished; they were even considered an affectation, and no longer practiced by young philologists, so that, notwithstanding an urgent recommendation to students of medicine and jurisprudence, (circular of Jan. 7th, 1826,) they entirely disappeared from many gymnasiums. The regulations for

maturity-examination of 1834 decreed again that the examination in Latin should be held in this language, and opportunity should be given to all to show their fluency and ability of expressing themselves in Latin in a well connected discourse. Circular of Jan. 12th, 1856, extended this regulation also to the examination in the Greek language; but to revive speaking in Latin, it requires well practiced teachers, as well as a natural aptitude for it among those who favor the same; hence the regulation of Dec. 24th, 1861, suggests that in the testimonial of final examination for theologians, the degree of their fluency in speaking Latin should be noted, and the examined should be exhorted not to neglect the practice of it.

Greek.—The reading of Greek authors commences in the upper division of class III., with Xenophon's *Anabasis*, and is chiefly limited to the writings of Xenophon, Demosthenes, Plato, Thucydides, to which are added Homer in class II. and Sophocles in class I. They proceed on the same principles as with Latin. The prominence given to this study in the first part of the present century, by reading even Pindar, Aristophanes and Æschylus, was limited to a less measure by ministerial rescript of Dec. 11th, 1828, to the task of understanding, without difficulty, authors like Homer and Xenophon, and to the reading of selected tragedies of Sophocles and Euripides, and the easier dialogues of Plato. To read selected parts of Thucydides was permitted to such scholars only who had acquired great efficiency in the interpretation of Xenophon. Exercises in translating from German into Greek are intended only to familiarize with the rules of grammar; and for this purpose one hour per week is devoted to writing or extemporizing in Greek. Written exercises in both languages, dictated by the teacher, are highly prized, and determine the standing of each scholar in his class.

Mathematics.—Instructions in this branch, as long as four lessons per week were set apart, were so divided by the class teacher, with the consent of the director, that in the first course of six months, (semester) geometry was taught, and in the second course, arithmetic; or that two lessons were alternately devoted to each subject. But since 1856, in classes IV. and III., only three lessons per week are devoted to mathematics; either but one subject is taught in each semester, leaving it to the industry of the scholar and to occasional reviews to attain the other, until his promotion to the next class, or in the different grades of instruction, now geometry and now arithmetic are alternately placed in the foreground. Instructions in Hebrew, singing and gymnastics are given after school hours, as also in drawing for the middle and upper classes. Deviation from this plan is permitted only with the consent of the board of instruction, when required by the local or geographical condition or the endowments of the school. Discretion is allowed, 1, to increase the lessons in German in the lower classes, where the teaching of Latin and German is supposed to be under one teacher; 2, to devote the hours fixed for instruction in natural history, when no suitable teacher for this

branch is engaged, in classes VI, and V, to the study of geography and arithmetic, and in class III, to history and French.

Mental philosophy is no longer designated as a part of instruction, but the essential part thereof, the fundamental principles of logic, may be connected with the lessons in German in class I. It is also left to the provincial school-board to charge one of the teachers of mathematics or of philology with the necessary instructions in mental philosophy, and to increase his hours of teaching by one, limiting thereby the number of lessons in German to two. To omit the study of Greek is only permitted when in smaller cities the gymnasium has to accommodate students who do not desire to prepare themselves for such learned professions as require the full education of a gymnasium, but who desire to acquire a general education for civil vocations.

"The execution of the general plan of instruction," says the cabinet order, "can produce the intended effect on the young confided to the gymnasiums, only when the teachers of the school are conscious of their labor being a work common to all, where the activity of the one finds its completion in the activity of the other, and therefore all must work in harmonious connection." Teachers in their lessons and plan of instruction must not disregard the prescribed books of science or tables of history, etc., lest the scholars would not receive the benefit intended, which consists mainly in familiarity with a well defined subject. Increased attention is required by the department to be given to written lessons, the extent of which was limited to a proper measure by circular of May 20th, 1854. Directors must take frequent cognizance of the subjects for composition, and of all written lessons, to prevent any overtaxing or unsuitable selection. In order to give students an opportunity, before they leave the gymnasium, to acquire a thorough knowledge of ancient classical literature, within the limits prescribed for gymnasiums, a circular rescript of April 11th, 1825, recommended private lectures at all gymnasiums, which have been given by the greater part to this day, the director and teachers readily undertaking this additional work. Certain it is, that the revival of free private study outside of regular school lessons, must have a beneficial influence on the independent attendance of lectures at universities.

Religion.—Instruction in religion has attained increasing significance at the secondary-schools since 1815. The regulations for examination of 1812 contained no provisions for special inquiries as to the knowledge in religion required of candidates. The circular of the school-board of the province of Brandenburg, of Aug. 4th, 1826, which was adopted by others for a long time, though finding not a few teachers suitable for teaching religion, for the greater part of them had studied theology, yet found but few qualified by examination, as an examination of candidates with regard to ability in teaching religion, was not ordered until 1824. The quick and sincere religious spirit of that time itself required that instruction in religion should occupy equal rank with the most important branches, and great value was ascribed to it. The plan of teaching religion included

Biblical history in the lower classes, committing to memory the chief parts of the catechism, with references from the Bible, and suitable hymns; in the middle classes, concise lectures on the doctrines of religion, based on the catechism of Luther; in the upper classes, introduction to the books of Holy Scripture and history of the Christian religion, with particular attention to the interpretation of doctrines, and to the reading and expounding of entire parts and books of Holy Writ. The class-professors were designated as suitable teachers of religion in exceptional cases by the "instruction for directors of 1824," and to them instruction in religion was confided, if possible. Important for the leading principles under the administration of Altenstein, is the memorandum added to the address at the prorogation of the fourth Prussian Diet, of May 8, 1832. The Diet had desired the employment as teachers of well known religious theologians, which elicited this reply: "I have always hesitated to introduce this arrangement in the Protestant gymnasiums, or to make it general, because the teachers of the gymnasium would thereby lose influence of a religious and moral character upon their scholars, and might be prevented from having that spiritual communion with them which might prove a blessing to them for life." Under the administration of Eichhorn, a decree of Aug. 17, 1842, required that instructions in religion at gymnasiums should be confided to candidates of decided piety, and if school-boards were in want of suitable persons, they should apply to the Evangelical Pastors' Association in Berlin, which from an ample choice was always able to comply with their requests. But little use was made of this offer, and after 1848, great efforts were made to supply secondary-schools with well qualified teachers of religion who were not of the theological profession. A report on the existing number of such teachers, and on their qualification and right of teaching religion, called for in 1854, caused this right to be withdrawn from many a teacher qualified by testimonial of examination, but not suitable as shown by his practice in teaching, whereas now candidates were engaged who possessed the required knowledge in religion, but were not capable of spiritual sympathy with the young. Lately, (by circular of school-board, July 5th, 1865,) the directors in the province of Brandenburg, at the request of the royal consistory, have been instructed in the report of their plan of lessons to specify the teachers who shall impart instruction in religion, and the extent of their qualification from testimonials, as well as to designate the classes in which they are to teach religion.

The parochial classes of catechumens are attended by the pupils of a gymnasium for one or two years; before 1856, lessons in religion were given at the same time with the instructions of catechumens, so that the latter could not attend their classes. When by the new general plan the number of obligatory lessons has been decreased to thirty, this division ceased.

Divine service in school, and prayer in the morning and evening, take place only at private institutes and alumnates; for other schools it has

been recommended, by circular of Aug. 4th, 1826, to promote, as far as possible, the attendance of scholars at public worship, without however exercising any constraint or painful control. With regard to the commencement and close of vacations, a regulation from the department, of April 2d, 1858, declares that the duty of the Sabbath or of holy days should not be interfered with by obliging scholars to travel on such days, but as it did not attain this object, it has been set aside again. Participation of teachers and scholars at holy communion is not recommended, except at private boarding-schools; in the other schools, whenever it takes place, it is limited to the voluntary attendance of those scholars whose parents do not reside at the place.

Gymnastics.—Instruction in gymnastics has been formally recognized again, by cabinet order of June 6th, 1842, as a necessary and useful part of the education of boys, and as a part of the means of public instruction. Gymnastics should therefore be added to the parts of instruction, and connected with all public institutions, be placed under the superintendence of the directors, and care should be taken that physical exercises be had to a proper extent, with due simplicity of object and manner. The instructions given on the royal central gymnastic institute are in close connection with the system at present introduced into the army for the military training of soldiers, and due value is ascribed to the fact that proper practice in gymnastics at school promotes the military efficiency of the nation. The introduction of gymnastics into the organization of schools met with no difficulty in smaller cities, of small distances and with vacant ground; but in larger cities, particularly in Berlin, it was difficult to introduce this branch, notwithstanding all the enthusiasm manifested in its favor. As the regulation of June 6th, 1842, makes the participation in physical exercises solely dependent upon the free consent of parents or their representatives, gymnastics, notwithstanding the attention given by the teachers, are attended by not one-fourth of the scholars of large schools, the place for exercises being three miles distant and the homes of scholars scattered throughout the whole city.

Stenography.—Instruction in stenography has been introduced during the last twenty years, chiefly after the system of Stolze, and by the influence of its adherents, and has moreover been practiced at higher schools or by single scholars in private courses, and many patrons of city-schools have furnished means for its introduction as a side branch of instruction. Also the House of Representatives, on account of the many (thirty) petitions presented in favor of a faculty for stenography, has (June 27th, 1862,) recommended it to the favorable consideration of the Government. The Department of Instruction has not yet consented to the introduction of this mechanical art into the plan of lessons, it being serviceable for particular purposes only, but have permitted the use of class-rooms for private lectures.

In some schools the same teachers conduct the instruction of scholars through several classes; though this arrangement leads to a more exact

knowledge of the abilities and disposition of scholars, it soon becomes a tiresome monotony for them even under the best teacher.

VI. REAL-SCHOOLS AND HIGHER BURGHIER-SCHOOLS.

It is not our province here to speak of the object and aims of real-schools, but of their history and condition in Prussia. The name was first used by Deaconus Chr. Semler of Halle, and in 1738 the royal government and the royal society of sciences established a real-school for mathematics, mechanics and agriculture, which however had but a short existence. More importance was acquired by the school founded by J. Julius Hecker in Berlin, (1747,) after many futile experiments, and even dwindling down into an elementary school for a time, by being at last organized by A. Spillecke, since 1822 director of the Frederic William gymnasium, with this object: "To combine the demands of a finished general education with practical training for civil life." The Prussian gymnasiums had always for their object the fundamentals of a finished education, but the spirit of the age now turned away from old, well tried means of instruction, and looked for the success offered by the so-termed real sciences, at least for pupils not intending a collegiate education. The following chronological review gives further details. The expectations built on these schools by the public among mechanics and tradesmen, were not fulfilled. The real-gymnasium, formed in 1829 out of the old Coeln-School at Berlin by the efforts of the mayor of the city, Von Baerensprung, gradually transformed itself in 1849 into a regular gymnasium, with little modifications in the plan of instructions, and real-schools readmitted the study of ancient languages in a more extended form. Moreover, with equal privileges, attached in 1832 to the satisfactory final examinations at these schools, of entering the postal service, that of architecture or the military profession, etc., there existed a great variety in the amount of learning acquired at individual schools, particularly at those of provincial cities. Still greater inconveniences resulted from the final examination being in some branches equal with that at gymnasiums, and the uniform privileges of classes, for it happened that students from real-schools, who had passed the final examination there, entered the upper division of class III, where, with a total want of knowledge of the Greek language, they only satisfied the requirements of that class in other respects. Therefore a reorganization of these schools became necessary, which was effected after calling for the advice of the provincial school-boards, by the order of instruction and examination for real-schools and secondary burgher schools, of October 6th, 1859. A memorandum on this (published by Wilgaud and Grieben) contains: *a*, for real-schools, 1, the plan of instruction and inner organization; 2, the regulations for final examination; 3, wherein real-schools differ from gymnasiums, and the privileges of the former. (*B*.) The same for higher burgher-schools. In explanatory notes we find: "The real and higher burgher-schools have the object to prepare, by scientific education, for

these higher vocations of life, for which academic studies are not required. Therefore the practical requirements of the time are not a measure for their organization, but the object to develop the mental faculties of the young intrusted to the care of these schools, to such a degree as to enable them for a free and independent realization of the duties of life afterwards. They are not technical schools, but, like the gymnasium, they work by general means of education and for fundamental knowledge. There is consequently no opposition in principle between gymnasium and real-school, but a relation of mutual completion. Both divide among themselves the task to offer the elements of complete instruction in what pertains to the different professions and vocations of life." A division has become necessary by the progress of science and the development in the relations of public life, and real-schools have herein adopted a coördinate position to the gymnasium.

Real-schools of the first and second order are distinguished mainly by having introduced the study of Latin, according to local demand, with the technical branches; further by limiting the course of classes III, and II, to one year, and reducing the requirements in some branches of examination to a lesser degree, in accordance with which the demands on these schools, their teachers, means of instruction, and endowments, are inferior.

The plan of instruction for real-schools of the first order, is the following:

PLAN OF STUDY FOR REAL-SCHOOLS IN 1859.

SUBJECTS.	Hours per week for each class.					
	VI.	V.	IV.	III.	II.	I.
Religion,	3	3	2	2	2	2
German,	4	4	3	3	3	3
Latin,	8	6	6	5	4	3
French,		5	5	4	4	4
English,				4	3	3
Geography and History,	3	3	4	4	3	3
Natural History,	2	2	2	2	6	6
Mathematics and Arithmetic,	5	4	6	6	5	5
Penmanship,	3	2	2			
Drawing,	2	2	2	2	2	3
	30	31	32	32	32	32

Several real-schools of the second order exclude the Latin, of which the two at Berlin, named "technical schools of the city," are the most prominent; they increase correspondingly the lessons in German, French, mathematics, arithmetic, natural history, and drawing.

Real-schools connected with gymnasiums under one director, must have, in common with the latter, besides a preparatory department, only classes II, and I. Common order of discipline—teachers, school-house, instructions in singing and gymnastics, religious worship and other exercises—has always been of good influence on the real-schools.

The name of "higher burgher-schools" had been adopted by many real-schools previous to 1859; since then, those are included in that denomination which have only five classes, including the second, but beyond that are organized completely after the regulations for real-schools. The testimonial of final examination entitles to admission in class I, of a real-school of the first order, and to the privilege of military service of one year.

VII. GENERAL MATTERS.

The chronological table of Higher Schools, which we furnish hereafter, will show in what periods of time, and with what rapid increase in late years they have been created and developed, and what zeal has been manifested by State, communities, and associations. The increase of population and the growing desire for education augment the attendance at Higher Schools in a degree still entirely out of proportion with their number. Though a number of scholars which director and teachers can not look over at a glance, is certainly an intolerable condition, yet a general law fixing their number in classes and for the entire school, has not been enacted. In general it is a rule for gymnasiums, which is exceptionally applied at some with great inconvenience, that in classes I, and II, not above forty each, and in the other classes not beyond fifty; in the upper classes of real-schools thirty in each, in the middle classes forty, in the lower classes fifty, should be admitted. The lesser number for real-schools has been adopted, because apparatus for demonstrative instruction would become unprofitable to a great many scholars. With a greater number of scholars in permanent attendance, parallel divisions of classes must be arranged. A community can obtain the consent of the department for establishing a higher school, after furnishing satisfactory evidence that the elementary schools of their locality are insufficient, and that ample provision has been made for school-houses and endowments. Many communities have thought it a special honor to erect splendid school-edifices.

The scholastic year commences, varying with different provincial or local custom, at Easter or Michaelmas; with all Catholic institutions, and pretty generally throughout the Western provinces, at Michaelmas; with Protestant schools at Easter. In the former, the admittance of new scholars and removal to higher classes takes place generally but once a year, in the Fall season. Though annual courses of instruction are considered more practical, from a didactic and pedagogic point of view, the administration has as yet not introduced a general uniformity, in consideration of local circumstances. Where the admittance of scholars is not limited to one term in each year, as for instance in larger cities, it takes place at Easter and Michaelmas, from which two removals into higher classes necessarily result.*

* We here append a note on attendance in classes, taken from that excellent work on secondary-schools in Prussia by Wiese: "A general law on the number of scholars in classes and entire school does not exist. It is generally accepted that in classes I, and II, not above forty, in the

Vacations.—The vacations depend upon the period of the scholastic year. By ministerial circular of Nov. 6th, 1858, their duration is fixed at ten and a half weeks per year. The longer vacations of four weeks of Protestant schools in the Eastern provinces fall in the month of July, and two weeks at the end of the Summer course; with most Catholic schools, and generally throughout the province of the Rhine, and in part in Westphalia, the vacation of six weeks comes at the end of the annual course.

School-books and means of instruction.—According to instructions for royal consistories, of October 23d, 1817, the examination of school-books in use at the time, as well as the selection of books to be rejected or of new ones to be introduced, and the supervision in the publication of new school-books, was committed to this authority, submitting all decisions to the approval of the Department of Instruction. A general revision of all the school-books introduced was ordered by ministerial rescript of April 24th, 1837; but such liberty reigned in the use of the same, that not only directors, but single teachers selected after their own opinion. This caused the regulation of June 14th, 1848, which instructed directors to obtain the approbation of the provincial school-board for every new book to be introduced. The school-board, unless the book had been approved previously, reported to the Department of Instruction. Attention was called again to this regulation under date of April 28th, 1857, together with an instruction to work for greater simplicity and uniformity in the means of instruction, and with this limitation: "When the introduction of a book for one gymnasium or progymnasium in a province has been approved, other gymnasiums, etc., of the province can introduce the same without further consent; the same with regard to real-schools and secondary burgher-schools; but a book approved for gymnasiums and progymnasiums is not at the same time approved for real-schools and secondary burgher-schools." Special books or other means of instruction are recommended in circulars, without obligation to adopt them; all in use must be mentioned in the annual programme of the school.

School Programmes.—The publication of school-programmes is of old date. In these the director advised the public annually, inclosing an invitation to the public examination of the most important events in his school. A scientific or pedagogic subject of general interest was generally connected with it. Mutual exchange of these programmes among the different gymnasiums occurred rarely before 1822, in which year their exchange by all gymnasiums was ordered. Circular of Aug. 23d,

other classes not above fifty, should be admitted. With a permanent greater number, parallel divisions of classes must be arranged. The tabular summaries show how difficult it has been in many places to be confined to these limits." The tables are given, p. 466, and demonstrate an overcrowding, dangerous to the result of instruction. If in classes I and II, are fifty-three and seventy-three pupils, as during the summer of 1863 in Lyck, or fifty-two and sixty-four, as in Brieg, in the first class sixty-one, as in Rosenberg, fifty-five, as in Zullichau, fifty-three, as in Glogau and Ratibon; or in classes IV, V and VI, seventy-five, seventy-three, fifty-nine, as in Königsberg; sixty-one, fifty-nine, fifty-four at the same; sixty-two, seventy-nine, sixty-three in Elbing; seventy and seventy-five in Tilsit; fifty-four, sixty-two, ninety in Culm; fifty-eight, eighty-four, one hundred and ten in Prenzlau; seventy-two, sixty-eight, seventy-one in Posen; seventy-five, sixty-nine, seventy in Bromberg, etc., then the maximum has been passed to a dangerous extent, and the endeavor of the administration to remedy this evil by a division of classes is but too just.

1824, directed uniformity in form and contents of the programmes. The first part should consist of a treatise on a subject not foreign to school matters, of general interest at least for the educated, instructive for public schools in general or for gymnasiums in particular, the choice of which, within this description, to be left to the author; it is also permitted, in place of such treatise, to publish a suitable discourse delivered in the gymnasium during the year. This scientific treatise had to be composed alternately in the German and Latin languages, and the director and each teacher, one after the other, were to write the same. The second part, in German only, to be furnished by the director, contained information on school matters and plans of teaching. Copies of these programmes were sent to all the universities in the State, and to public libraries, and for exchange with all higher schools were remitted to the provincial school board; this exchange has been extended, through the Department of Instruction, since 1886, to nearly all the German States, the empire of Austria, and for a time to Denmark.

Books of Reference, Cabinets, etc.—Libraries, some of great value, as for instance that of the Joachimthal gymnasium at Berlin, can be found at all higher schools, and considerable funds are provided for their increase. Many institutions, since 1830, possess libraries for scholars which have been made up almost exclusively by contributions from the scholars and their patrons, for the object of putting within reach of students a suitable selection of publications, and to guard them against injurious reading. There are no general regulations in the administration of libraries, but each school has its own rules. The annual school-programme contains a list of all new books procured within the year. Moreover, gymnasiums have cabinets of musical instruments, of apparatus for natural philosophy and chemistry, cabinets of zoölogy, botany, etc., and other collections, generally the result of donations.

Discipline in Schools.—Though a general order of discipline for these schools does not exist, they are conducted in a uniform manner on the basis of instructions for directors and class-professors, and other circulars. A spirit of order, obedience and industry, to call forth which and to preserve, is the earnest endeavor of all and every teacher, together with a mutual esteem and affection between teachers and scholars, which lasts far beyond the years at school, predominates at all the higher schools of Prussia, and furthers and secures the good result of their labors. The principal means of discipline are, a sincere fear of God, the example of teachers in morality and learning, a mutual amicable understanding between school and family, an exciting method of teaching, awakening and rewarding a well regulated industry, constant assistance and discreet approval of progress. Thus most discipline is of a positive kind, as promotion to higher positions or classes, tokens of merit, gradation of testimonials, premiums; but the most effective means for many scholars and in most cases is the approval of the teacher and the consciousness of deserving it. A censure from the teacher, particularly when entered on

the class-book, is already a severe punishment, as the class is revised monthly by the directors. Remaining after school is considered a corrective against idleness or inattention, but can not be inflicted without the presence of a teacher or the consent of the director. Extra lessons as a punishment, a remedy frequently applied in English schools, must be given to a limited extent only, with a view to being exercises for improvement. Incarceration for misdemeanor is decreed by the director only, and proves more effective by its character than by long hours or fear of prison; in many schools they have no carcer, (prison,) and this name given to a school-room has the same effect. According to the order of discipline for the province of Westphalia, this punishment can be extended to several days without the usual comfort or diet. Corporal punishments, which at the commencement of this century still were an ordinary means of discipline, but disappeared almost entirely in the course of time, should be dispensed with as much as possible, (circular of the school-board of the province of Brandenburg, March 9th, 1843,) and when inflicted, it should be on the principle that the moral impression of this punishment is a greater means of correction than bodily pain. Exclusion from school may take place, when the scholar has twice attended the annual course of a class unsuccessfully; or, as an extreme remedy, when other means of discipline have failed, or for acts of malice or immorality. But to those removed in this manner, other schools are still open; only they are placed under special surveillance, and in case of relapse they are immediately turned out again. The most effective means of discipline are certificates, recording conduct, attention, industry and progress, and furnishing an extract from the class-books, which from time to time are sent to the parents of scholars for their information, and by numbers I, II a, II, II b, III, indicate the moral standing and degree of knowledge of the scholar.

The position in classes, or, as it is called, order of rank, is fixed at the commencement of each semi-annual course, according to the number of the certificate; and in the upper classes according to date of entry or to the decision of the teachers' conference. But during the course these positions are frequently changed, often weekly, according to merit in recitations or extemporés. In the lower classes, the system of change for every lesson is favored, because, with younger boys, beyond the pedagogic object of exciting attention and assiduity by a proper ambition, it answers also a dietetic purpose of interrupting by regulated exercise the fatigue of sitting continually.

The admission of scholars from abroad is left to the choice of their parents or guardians; but none are admitted who are not placed under suitable domestic control. To ascertain this is the duty of the director, and a change of boarding-place must be immediately brought to his knowledge, and he may demand that a scholar conform to his wishes or leave the institution.

Privileges.—A great number of branches of the administration and of

public institutions, with the increased demands by the progress of time on their own accomplishments, have also increased their demands upon the education of those who desire admittance, and the requirements on the one side have become privileges on the other, for those who fulfilled them. Thus the following privileges are attached to secondary-schools, equally for gymnasiums and real-schools:

1, Passing the third class: admittance into the first division of the royal horticultural institute at Potsdam.

2, Admittance to class II: *a*, entering the postal service; *b*, qualification as technical teacher.

3, Frequenting class II, for six months: *a*, entering apprentice of pharmacy; *b*, privilege of one year's military service; (without knowledge of Greek, a six months' attendance at class I, is required for this latter privilege.)

4, Frequenting class II, for one year, qualifies for assistant post-master, and some civil offices.

5, Admittance in class II, upper division, entitles to admittance as pupil of the veterinary school.

6, Admittance in class I: *a*, entering as clerk in bureaux of subsistence; *b*, qualifies for civil engineer; *c*, for clerkships in the offices of the civil administration of a province; *d*, for clerkships in the subaltern courts of justice.

7, Frequenting class I, entitles to admittance at royal academies of agriculture.

8, One year's attendance of class II, qualifies for, *a*, clerkships in the bureaux of subsistence, etc., of the army; *b*, of those of the navy; *c*, of those of the revenue service; *d*, entitles to admittance at the final examination of technical schools.

9, Testimonial of maturity: *a*, admittance at universities; *b*, qualification for the position of ensign in the army; *c*, gives admittance to the royal academy of architecture in Berlin; *d*, to the royal academy of mining at Berlin; *e*, to the forester's school at Neustadt Eberswalde (provided that a satisfactory examination in mathematics was passed;); *f*, the postal service; *g*, to the royal polytechnic institute at Berlin.

Corresponding privileges have been granted to the real-schools of the second order and to higher burgher-schools.

Private Schools and Institutions.—According to the enactments of common law, private institutions and individuals, who intend to follow the vocation of instructing the young, are required to prove their capacity before the provincial school-board, and obtain a testimonial of qualification. This law was revoked in 1811 by the "regulation for Trades, etc.," but reenacted in 1834, together with the provision that the above testimonial of qualification should not only have regard to knowledge, but also to morality and loyalty in religion and politics. For foreigners the approval by the Department of Education and of the Bureau of Police was required. This regulation was published Dec. 31st, 1839, and di-

rected also that private schools and institutions should be permitted in such places only, where there was sufficient provision for education in public schools. The consent for establishing a private school may be revoked, and is not transferable to another person; it expires when instructions have been suspended for six months. With regard to supervision, private schools are subject to the same regulations as public schools; generally a clergyman is president of the visiting board. By circular from the department, of June 17, 1862, the provincial authorities have been empowered to give to foreigners permission for the establishment of private schools without resort to the Department of Education.

VIII. CHRONOLOGICAL REVIEW.

The higher schools of Prussia may be classified according to date of their foundation:

A. Century VIII. and IX.—1, Cathedral School at Halberstadt, from the time of Charlemagne, transformed in 1818 into Cathedral Gymnasium; 2, Cathedral School at Paderborn, in 1614 Gymnasium Theodorianum; 3, Convent School at Pruem, in 1814 école secondaire, in 1852 Progymnasium; 4, Cathedral School at Münster, in 1588 Gymnasium of the Jesuits.

B. Century X. to XIII.—Convent School at Zeitz about 967, Gymnasium since 1820; 2, School at Treptow on the Rega, in 1170, (Bugenhager's Gymnasium since 1857;) 3, Cathedral School at Stendal, 1194, Gymnasium since 1819.

C. Century XIII.—1, School of St. Maria-Magdalene in Breslau, 1266, Gymnasium in 1648; 2, School of St. Peter's at Berlin in 1276, Coeln Real-Gymnasium in 1829; 3, Latin School at Herford in 1265, Gymnasium Fredericianum in 1766; 4, Cathedral School at Naumburg in 1290, became Cathedral Gymnasium in 1822; 5, School of the Church of St. Elizabeth in Breslau in 1298, Gymnasium in 1562; School of the Convent of Barefeet at Sagan in 1294, turned over to the Jesuits by Wallenstein, Gymnasium in 1846; 7, School at Marienwerder, Gymnasium in 1812; 8, School at Königsberg, Gymnasium in 1818; 9, Kneiphoff's Gymnasium at Königsberg.

D. Century XIV.—1, City School at Elbing, (1800,) Gymnasium, (1586;); 2, School at Reuss, (1802,) Electoral Gymnasium, (1778-1802,) école secondaire (1806,) Gymnasium (1852;); 3, Convent School at Muenchen-Gladbach (1815,) Progymnasium (1846;); 4, Parochial School at Königsberg, about 1885, Gymnasium (1811;); 5, Latin School at Wesel, (1842;) Gymnasium Academicum (1618;); 6, Classical School at Liegnitz, by combination of two parochial schools (1869,) Gymnasium (1814;); 7, Latin School at New Ruppın (1865,) Gymnasium (1812;); 8, Parochial School of St. John in Danzig (1850,) Real-School of first order (1860;); 9, Latin School of Marienburg (1851-1882,) Gymnasium (1860;); 10, Latin Schools of the Knights of St. John (1865,) of the Augustines (1850,) united at Glatz into Jesuits' College (1626,) Catholic Gymnasium

since 1773; 11, Academy at Culm (1886,) Secondary Burgher-School (1862;) 12, from the schools connected with the Norbertine Convent at Wedinghouse, near Arnsberg, was formed in 1648 the Gymnasium Norberti-Laurentianum; 13, two Secondary Schools in the old and new city of Quedlinberg (1540,) Lutheran Classical School in 17th century, and formed into Gymnasium illustre; 14, The old Latin School of the Church of St. Nicholas at Goerlitz, removed to the city in the 14th century, Gymnasium Augustum (1565.)

E. Century XV.—1, Gymnasium Montanum (1420,) Laurentianum (1440,) Cucanum (1450,) at Cologne transformed (1820,) after many changes since 1815 into the Catholic Gymnasium of Marzellen, into Evangelical Frederic Wilhelm Gymnasium (1830,) Catholic Gymnasium of the Apostles (1860;) 2, St. Peter's School at Danzig (1457,) Real-School, first order (1860;) 3, School at Trotttau (1480,) Gymnasium (1825,) Real-Sciences introduced (1861;) 4, Latin School at Seehausen, i. A. M. 1482, Progymnasium (1868,) Gymnasium (1865;) 5, Latin School at Aschersleben, Real-School, second order, (1859;) 6, Latin School at Anclam, Gymnasium (1847.)

F. Before the Reformation, in old time, undetermined.—1, Latin School at Linz on the Rhine, called Gymnasium Martianum, Progymnasium since 1855; 2, Latin School of the Catholic Convent Church at Essen, after the Reformation a Lutheran Burgher-School, Gymnasium since 1819; 3, Convent School at Vreden, since 1842 Progymnasium Georgianum; 4, Parochial Schools in the old and new city of Salzwedel, in 1744 united Latin School, in 1819 Gymnasium; 5, Parochial School at Guben, Gymnasium in 1818; 6, Great School at Spandau, Progymnasium since 1053, Gymnasium (1862;) 7, Great City-School at Perleberg, Real-School of first order, (1861;) 8, School at Prepzlau, Gymnasium (1812;) 9, Latin School of the Convent of the Holy Ghost at Breslau; 10, Latin School at Lauban, Gymnasium (1827;) 11, St. Martin's School at Halberstadt, Real-School, first order, (1868;) 12, Latin School at Schleusingen, Gymnasium (1858;) 13, School at Lippstadt, Real-School, first order, (1859;) 14, City-School at Emmerich, Gymnasium (1832;) 16, Parochial School at Luckau, Gymnasium, (1818;) 17, Convent School at Eupen, école secondaire communale (1794,) Secondary City-School (1814,) Secondary Burgher-School (1868.)

G. Century XVI.—*a.* Beginning of the century: 1, Secondary-School at Attendorn, Progymnasium (1825;) 2, Latin School of the Franciscan monks at Duren, Gymnasium (1826;) 3, School of the Convent of St. Severi at Erfurt, Protestant City Gymnasium, (1561,) Royal Gymnasium, (1820;) 4, Reformed School at Kreuznach, école secondaire, (1802,) Gymnasium of four classes, (1819,) of six classes, (1821;) 5, Latin School at Lennep, Secondary City-School in 1855; 6, Parochial School of St. Laurentii at Warendorf, Gymnasium Laurentianum (1857;) 7, Old Cathedral School at Colberg, Real-School (1845,) Gymnasium (1858,) at the same time Real-School, second order, (1868,) and Real School, first order,

(1865;) 8, Latin School at Grunberg, Real-School, first order, (1860;) 9, Evangelical Parochial School at Grossglogau, Evangelical Gymnasium, (1812;) 10, City-School at Stargard, United Royal and Groning Gymnasium, (1812.)

II. Century XVI., b. 1520-1560.—1, Evang. Latin School at Wittenberg, (1522,) Gymnasium (1827;) 2, Evangelical City School at Nordhausen, (1524,) Gymnasium, (1808;) 3, Union of three parochial schools at Stralsund to one classical school, in 1525, Gymnasium since end of 16th century; 4, Latin School at Eisleben, founded by Albert, Count of Mansfeld (1525,) united by Luther with St. Andrew's and St. Nicolas' School to a "chiefly Latin" School (1546,) Gymnasium, (1596;) 5, Protestant Latin School at Königsberg in Pr. (1525,) Real-School, first order, (1860;) 6, Lutheran School at Hirschberg (1526,) Gymnasium (1813;) 7, Union of Cathedral and City Schools at Brieg into City School (1529,) Gymnasium illustre (1569;) 8, Evang. School at Minden, (1530,) Real-School, first order, (1859;) 9, Latin School at Soest (1532,) Archigymnasium (1606;) 10, Evang. City School at Bunzlau (1532,) Gymnasium (1861;) 11, School of Sts. Albinus and Ægidius at Cottbus, Latin School since 1537, Gymnasium (1820;) 12, City Lyceum at Frankfurt on the Oder (1539,) Real-School, first order, (1861;) 13, Archigymnasium illustre at Dortmund (1543,) Gymnasium, with Real-School of first order, (1862;) 14, Lutheran Lyceum at Muchlhausen (1543,) Gymnasium (1626;) 15, State School at Pforta (1543;) 16, Pedagogium at Stettin (1543,) united with the Parochial School of St. James (14th century) into Royal and City Gymnasium (1805;) 17, Ducal Gymnasium at Dusseldorf (1545;) 18, Ducal Partic. School at Rastenburg (1545,) Gymnasium (1815;) 19, Lyceum at Wernigerode (1550,) Gymnasium (1863;) 20, Institute of the Convent at Rossleben (1554;) 21, Evang. School at Wetzlar (1555,) Gymnasium (1743;) 22, School of the Reformed Brothers' Union at Lissa (1555,) Provincial Gymnasium (1624,) Royal Gymnasium (1821;) 23, Ducal School at Oels (1556,) Gymnasium illustre (1594,) recognized as Gymnasium (1812;) 24, Convent School at Bielefeld (1558,) soon after extended to Gymnasium; 25, Evang. Classical School at Danzig (1558,) reopened (1817;) 26, Classical School at Thorn (1557,) Real-School, first order, (1861;) 27, Latin School at Trarbach (1557,) Progymnasium (1855;) 28, Gymnasium at Duisburg (1559,) at the same time Real-School, first order, (1862;) 29, School of Sts. Catharine and Amalberg Church at Brandenburg, after the Reformation, Neustadt City School, first director known (1558,) united Gymnasium (1798.)

I. Century XVI., c. after 1560.—1, Classical Institute Hosianum at Braunsberg (1565,) Gymnasium (1811;) 2, Evang. Free School of Preparation for Secondary-Schools at Donndorf (1561;) 3, Union of the three Primary Schools at Greifswalde to one City School (1561,) Gymnasium (1812,) with Real-School, second order, (1859;) 4, College of the Jesuits at Treves (1563,) Gymnasium (1815;) 5, Evang. City School at New-Stettin (1570,) Gymnasium (1840;) 6, Catholic Latin School at Ander-

nach (1573,) Progymnasium (1815,) perfected in 1863; 7, the old School at Croffen, extended to a Classical School (1573,) secondary Burgher-school (1862;); 8, School of the Jesuits at Posen, (1573,) Vog. sim. Gymnasium (1804,) divided into Catholic Mary's Gymnasium and Protestant Frederic Wilhelm Gymnasium (1834;); 9, Berlin Gymnasium of the Gray Convent (1574;); 10, Cathedral School at Merseburg (1574,) Cathedral Gymnasium (1820;); 11, School of the Jesuits at Heiligenstadt (1575,) reopened as electoral Mayence Gymnasium (1774,) united with the Catholic Progymnasium at Erfurt (1834;); 12, Latin School at Saarbruck (1580,) Gymnasium and Provincial School (1804,) Gymnasium of six classes (1818-23; 13, College of the Jesuits at Coblenz (1586,) electoral Gymnasium (1778,) école secondaire (1808,) Gymnasium (1814;); 14, Schola illustris at Mörs (1582,) Progymnasium (1824,) completed (1862;); 15, City-school at Tilsit (1586,) Gymnasium (1812;); 16, Provincial school at Lyck (1588,) Gymnasium (1812;); 17, old Latin School, Brandenburg, since 1589 Soldern's School, united with the school in the new city (1797,) Burgher-School (1817-18,) Real-School, first order, (1859;); 18, School in the Convent at Shutorf, near Bentheim, (1588,) Gymnasium illustre (1591,) removed to Burgsteinfurt, reopened (1858,) with Real-School, second order, from 1861.

K. Century XVI., d. of unknown date.—1, Great School at Coeslin, Royal and City Gymnasium (1821;); 2, City-School at Custrin, Real-School, second order, (1859;); 3, German and Latin School at Elberfeld, Gymnasium (1789;); 4, Lyceum at Landsberg, a W., Gymnasium (1859,) with Real-School, first order, (1862;); 5, Great City-School at Memel, Gymnasium (1860;); 6, Evang. City-School at Pyritz, Gymnasium (1859;); 7, Beginning of an Evang. Classical School at Wehlau, Real-School, second order, (1859;); 8, at Graudenz, a, Catholic Classical School in a Jesuit College, Catholic Gymnasium (1781,) Seminary for Catholic primary scholars (1817,) b, Evang. Lutheran City-School, Real-School, second order, since 1859; 9, in the second period of the century, Lutheran Parochial School at Insterburg, in 1834 secondary Burgher-School, Real-School, second order, (1859,) Gymnasium with Real-School (1862,) became Real-School, first order, (1862;); 10, Revival of the Classical School at Schweidnitz, suspended during the Thirty Years' War, reopened (1707) as a Lyceum, Gymnasium (1812;); 11, about the end of the century, Gymnasium of the Jesuits at Aix-la-Chapelle, reorganized as Gymnasium (1816;); 12, Secondary-School at Juelich, College of the Jesuits (1664,) Progymnasium (1862;); 13, School of the Franciscan Convent at Warburg, founded before the 17th century, enlarged to a Gymnasium Marianum (1642,) Progymnasium (1856.)

L. Century XVII.—1, Electoral Institute at Joachimsthal in the Ucker-Mark (1607,) removed to Berlin as Joachimsthal Gymnasium (1650;); 2, Evang. Reformed School at Cleve (1617,) organized after the general plan for Gymnasiums (1782;); 3, School of the Jesuits at Conitz (1620,) Gymnasium (1815;); 4, College of the Jesuits at Neisse (1622,) Catholic Gym-

nasium (1773;) 5, Secondary-School of the Jesuits at Muenstereiffel (1625,) Gymnasium (1774-1810,) remodeled (1821;) 6, Collegium Ferdinandeum of the Jesuits at Grossglogau (1626,) Catholic Gymnasium (1773;) 7, Jesuit Gymnasium at Coesfeld (1627,) complete Gymnasium (1828;) 8, School of the Jesuits at Roessel (1631,) Progymnasium (1833,) Gymnasium (1865;) 9, Institute of the Jesuits at Breslau (1638,) College and Gymnasium (1659;) 10, Convent-School of the Franciscans at Recklinghausen (1642,) secondary City-School (1820,) Progymnasium (1822,) Gymnasium (1828;) 11, Convent-School of the Franciscans at Dorsten, Gymnasium Patrinum (1642,) Progymnasium (1856;) 12, Latin Convent-School at Neustadt, W. P., (1651,) Progymnasium (1857,) Gymnasium (1861;) 13, School of the Franciscus Minorites at Brilon (1652,) Gymnasium Petrinum (1858;) 14, Gymnasium illustre at Hamm (1657,) Gymnasium (1779;) 15, Gymnasium Dionysianum at Rheine, under direction of the Franciscans (1658,) Gymnasium Dionysianum (1861;) 16, Gymnasium Thomæum at Kempen (1664,) reopened (1802,) école secondaire (1804,) City-School of four classes (1814,) Progymnasium (1833,) Gymnasium (1857;) 17, Burgher-School at Königsberg, P., (1664,) Real-School, School, first order, (1859;) 18, School of the Jesuits at Oppeln (1669,) Catholic Gymnasium (1773;) 19, School of the Jesuits at Deutsch Krone (1672,) Progymnasium (1828,) Gymnasium (1855;) 20, School of the Minorite Convent at Siegburg (1673,) Progymnasium (1855;) 21, Gymnasium of the Jesuits at Bonn (1673,) Prussian Gymnasium (1814;) 22, Latin School at Magdeburg (1674,) Cathedral Gymnasium (1822;) 23, Frederic Werder Gymnasium at Berlin (1681;) 24, College Royale Française at Berlin (1689;) 25, Latin School at Wipperfurth (1690,) Progymnasium (1855;) 26, Frederic School at Francfort, second order, (1694,) Gymnasium (1814;) 27, Franké's Institutes at Halle; Poor School and Pedagogium (1695,) Latin School (1697;) 28, Collège Française at Königsberg, Private School (1698,) Royal School (1701.)

M. Century XVIII.—1, The Academy of Knights at Brandenburg, (1705;) 2, College of the Augustines at Saarlouis (1707-1789,) Progymnasium (1816,) secondary Burgher-School (1862;) 3, Academy of Knights at Liegnitz (1708;) 4, Evang. School at Landshut (1709,) Real-School, second order, (1859;) 5, Pedagogium of the Convent of our Lady at Magdeburg (1711;) 6, Latin School at Neuweid (1716,) Gymnasium (1819,) partly secondary Burgher-School, partly Gymnasium (1825;) 7, School of the Jesuits at Fraustadt (1722,) dissolved (1773,) reestablished (1781,) Real-School, first order, (1860;) 8, Orphan Home and Institute at Züllichau (1723,) Royal Pedagogium (1766;) 9, Great School at Gumbinnen soon after 1724, Gymnasium (1812;) 10, Enlargement of the Latin School at Potsdam (1739,) Gymnasium (1812;) 11, Gymnasium Mariano-Seraphico-Nepomucenum at Rietberg (1743,) Progymnasium (1825;) 12, Royal Real-School and Frederic Wilhelm Gymnasium at Berlin (1747,) Gymnasium and Real-School, first order, (1859;) 13, Latin School at Leobschutz (1752,) Catholic Gymnasium (1802;) 14, Orphan

House at Bunzlau (1753,) recognized as *pium corpus*, with the privilege of qualifying for the University (1760,) Royal Evang. Orphan School (1805,) Burgher-School (1814,) now Progymnasium; 15, first Real-School in Silesia at Breslau (1765,) *Schola Fredericiana* (1776,) Gymnasium (1812;) 16, School of the Franciscans at Hedingen (1770,) Latin School 1818, Gymnasium with Real School classes (1840,) Prussian Gymnasium (1851;) 17, first Commercial School at Magdeburg (1778-1806,) second (1800-1817,) third Technical and Commercial School (1819,) Real-School, first order, (1861;) 18, Latin School at Mulheim on Rh., to 1785, Progymnasium (1855;) 19, Provincial Institute of Education at Jenkau, near Danzig, (1798,) Classical School (1801-1814,) Teachers' Seminary (1819,) secondary Burgher-School (1843;) 20, Commercial School at Hagen (1799,) Real-School, first order, (1862;) 21, old Convent School at Eupen (1794-1814,) *école secondaire*, and secondary City-School, secondary Burgher-School (1868.)

N. Century XIX.—1, Wilberg's Private Institute at Elberfeld (1806,) secondary Burgher-School (1829,) Real-School, first order, (1859;) 2, Real-School classes of the Francké Institute at Halle (1808,) Real-School, first order, (1861;) 3, College of the Carmelites at Cologne, opened as Progymnasium (1808,) secondary City-School (1820,) Gymnasium of the Carmelites (1825,) Frederic Wilhelm Gymnasium (1830;) 4, Catholic Gymnasium at Gleiwitz (1816;) 5, School for Boys at Bromberg (1817,) Real-School, first order, (1860;) 6, Former School of the Jesuits at Bromberg, Gymnasium (1817;) 7, Burgher-School at Breslau (1817,) Real-School, first order, (1859;) 8, old Parochial School at Soran, Gymnasium (1818;) 9, Cauer's Private School opened in Berlin (1818,) removed to Charlottenburg (1826,) *Pedagogium* (1840,) Progymnasium (1858;) 10, Secondary-School for Boys at Inoracław (1819,) Progymnasium (1857,) completed in 1860; 11, the City-School of Crefeld, united with the Scheuten Institute in 1819, Real-School, second order, in 1859; 12, Evang. Gymnasium at Ratibor in 1819; 13, Technical School at Münster in 1822, City Real and Provincial Technical School in 1851, Real-School, first order, 1859; 14, Mathematical Institute at Erfurt in 1822, Real-School in 1834, Real School, first order, in 1859; 15, Secondary City-School at Barmen in 1823, Real School, first order, in 1859; the Progymnasial classes of 1857 became Progymnasium in 1864, Gymnasium in 1865; 16, Lyceum at St. Wendel in 1824, Progymnasium in 1856; 17, City (Fred. Werder's) Technical School at Berlin in 1824, Real School, second order, 1859; 18, Private School at Rheydt in 1827, secondary Burgher-School in 1860; 19, Burgher-School at Erkelenz in 1828, Progymnasium in 1856; 20, secondary Burgher and Real School at Cologne in 1828, Real School, first order, in 1859; 21, Evang. secondary Burgher School at Meseritz in 1833, Real School, first order, in 1859; 22, Royal City Secondary School at Berlin in 1832, Real School, first order, in 1859; 23, Real School at Neisse in 1832, of first order in 1868; 24, Gymnasium at Culm (1832-37;) 25, Stralau secondary City School at Berlin in 1833,

secondary Burgher School in 1860; 26, City School for Boys at Wittstock in 1834, Real School, second order, in 1863; 27, Private School at Dueren recognized as a public one in 1884, secondary Burgher School in 1863; 28, secondary Burgher School at Aix-la-Chapelle in 1835, Real School, first order, in 1861; 29, secondary School for Boys at Muelheim, in 1835, Real School, first order, in 1859; 30, Real School at Nordhausen in 1835, second order in 1859; 31, Real School at Potsdam in 1835, first order in 1859; 32, District School at Krotoschin in 1836, Gymnasium in 1854; 33, Pedagogium at Putbus in 1836; 34, Dorotheenstadt secondary City School at Berlin in 1836, Real School, first order, in 1861; 35, Luisenstadt secondary City School at Berlin in 1836, Real School, first order, in 1859; 36, Real School at Elbing in 1837, first order, in 1859; 37, secondary Burgher School at Goerlitz in 1837, Real School, first order, in 1859; 38, Real School at Dussekldorf in 1838, first order, in 1859; 39, Burgher School at Tilsit in 1839, Real School, first order, in 1860; 40, Frederic Wilhelm School at Stettin in 1840, Real School, first order, in 1859; 41, Rhenish Academy of Knights at Bedburg in 1841; 42, secondary City School at Solingen in 1841; 43, Evang. Private School at Muenchen-Gladbach in 1842, secondary Burgher School in 1860; 44, Gymnasium at Ostrowo in 1845; Private Institute at Hechingen in 1844, pr. secondary Burgher School, 1859; 46, City Real School at Burg in 1844, Real School, second order, in 1859, Gymnasium in 1864; 47, Progymnasium at Hohenstein in 1845, Gymnasium in 1857; 48, secondary Burgher School at Treves in 1846, united secondary Burgher and Provincial secondary School in 1847; 49, Frederic Gymnasium and Real School at Berlin in 1850, the latter to first order in 1859; 50, secondary Private School at Crefeld in 1851, secondary Burgher School in 1863; 51, Private School at Freyenwalde, a. v. in 1851, Progymnasium in 1863; 52, secondary Private Institute at Guetersloh in 1851, Gymnasium in 1854; 53, Real School at Stralsund in 1852, first order in 1862; 54, Real School and Progymnasium at Ruwicz in 1853, Real School, first order, in 1863; 55, old City School at Greifenberg, in Pomerania, since 1852 Frederic William Gymnasium; 56, Rectorate class at Schrimm, changed into a Secondary School in 1853, Progymnasium in 1861, Gymnasium in 1866; 57, Real School at Posen in 1853, first order, 1859; 58, old Evangelical Parochial School at Stolp, Pomerania, Real School since 1854, Gymnasium in 1857 with Real School classes, the latter secondary Burgher School in 1860; 59, Real Institute at Ruhrort in 1857, Real School, first order, in 1862; 60, old Latin School at Demmin, Progymnasium in 1857; 61, secondary School for Boys at Schneidemuehl in 1858, Progymnasium in 1863; 62, Progymnasium at Berlin in 1858, Royal Wilhelm Gymnasium in 1861; 63, old City Lyceum at Luebben, Real School, second order, in 1859; 64, old Royal secondary School for Boys at Kreuzberg, Silesia, secondary Burgher School in 1860; 65, Catholic Gymnasium at the Apostles in Cologne in 1860; 66, old Latin School at Lauenberg, Pomerania, secondary Burgher School in 1860; 67, secondary Burgher

School at Spremberg in 1861; 68, old Evangelical Rectorate School at Luedenscheid, secondary Burgher School in 1862; 69, secondary Burgher School at Neustadt-Eberswalde in 1862; 70, Progymnasium at Gnesen in 1868, Gymnasium in 1865; 71, Real School, second order, at Essen in 1864; 72, Luisenstadt Gymnasium at Berlin in 1864; 73, Sophia Gymnasium at Berlin in 1865; 74, Luisenstadt Technical School, Real School, second order, at Berlin, 1865; 75, secondary Institute at Jauer, Gymnasium in 1865.

IX. SUMMARY OF GYMNASIUMS AND REAL-SCHOOLS ACCORDING TO PROVINCES.

A. GYMNASIUMS.

I. PROVINCE OF PRUSSIA.

- a. *Government of Königsberg*: 1, Königsberg, Frederic College; 2, at the same, old City Gymnasium; 3, at the same, Kneiphoff Gymnasium; 4, Memel; 5, Braunsberg Catholic Gymnasium; 6, Rastenburg; 7, Hohenstein; 8, Roessel, Catholic.
- b. *Government of Gumbinnen*: 9, Gumbinnen; 10, Insterburg; 11, Tilsit; 12, Lyck.
- c. *Government of Danzig*: 13, Danzig; 14, Neustadt, Catholic; 15, Elbing; 16, Marienburg.
- d. *Government of Marienwerder*: 17, Marienwerder; 18, Culm, Catholic; 19, Thorn; 20, Conitz, Catholic; 21, Deutsch-Krone, Catholic.

II. PROVINCE OF BRANDENBURG.

- a. *City of Berlin*: 1, Gymnasium of the Gray Convent; 2, Joachimsthal Gymnasium; 3, Frederic Wilhelm Gymnasium; 4, French Gymnasium; 5, Frederic Werder Gymnasium; 6, Frederic Gymnasium; 7, Wilhelm Gymnasium; 8, Coeln Real Gymnasium; 9, Louisenstadt Gymnasium; 10, Sophia Gymnasium.
- b. *Government of Potsdam*: 11, Potsdam; 12, Brandenburg Gymnasium; 13, Brandenburg Academy of Knights; 14, Spandau; 15, New Ruppín; 16, Prenzlau.
- c. *Government of Frankfurt*: 17, Frankfurt; 18, Landsberg; 19, Königsberg; 20, Züllichau Pedagogium; 21, Gaben; 22, Sorau; 23, Cottbus; 24, Luckau.

III. PROVINCE OF POMERANIA.

- a. *Government of Stettin*: 1, Stettin; 2, Anclam; 3, Pyritz; 4, Stargard; 5, Greiffenberg; 6, Treptow.
- b. *Government of Coeslin*: 7, Coeslin; 8, Colberg, Cathedral Gymnasium; 9, New Stettin; 10, Stolp.
- c. *Government of Stralsund*: 11, Stralsund; 12, Greifswald; 13, Putbus, Pedagogium.

IV. PROVINCE OF SILESIA.

- a. *Government of Breslau*: 1, Breslau, Elizabeth Gymnasium; 2, Breslau, Magdalen Gymnasium; 3, Breslau, Frederick Gymnasium; 4, Breslau, Matthias Gymnasium; 5, Oels; 6, Brieg; 7, Schweidnitz; 8, Glatz, Catholic.
- b. *Government of Liegnitz*: 9, Liegnitz, Academy of Knights; 10, Liegnitz, Gymnasium; 11, Jauer; 12, Glogau, Evangelical Gymnasium; 13, Glogau, Catholic Gymnasium; 14, Sagan, Catholic; 15, Bunzlau; 16, Goerlitz; 17, Lauban; 18, Hirschberg.
- c. *Government of Oppeln*: 19, Oppeln, Catholic; 20, Neisse, Catholic; 21, Gleiwitz, Catholic; 22, Leobschutz, Catholic; 23, Ratibor.

V. PROVINCE OF POSEN.

- a. *Government of Posen*: 1, Posen, Frederic Wilhelm Gymnasium; 2, Posen, Mary Gymnasium, Catholic; 3, Lissa; 4, Krotochin; 5, Ostrowo, Cath.
- b. *Government of Bromberg*: 6, Bromberg; 7, Inowracław, Cath. and Prot.; 8, Gnesen, C. and P.; 9, Schrimm, C. and P.

VI. PROVINCE OF SAXONY.

- a. *Government of Magdeburg*: 1, Magdeburg, Pedagogium at the Convent of

- Our Lady; 2, the same, Cathedral Gymnasium; 3, Snedal; 4, Seehausen; 5, Salzwedel; 6, Halberstadt; 7, Wernigerode; 8, Quedlinburg; 9, Burg.
- b. *Government of Merseburg*: 10, Merseburg, Cathedral Gymnasium; 11, Halle, Pedagogium; 12, Latin School; 13, Wittenberg; 14, Torgau; 15, Eisleben; 16, Naumburg, Cathedral Gymnasium; 17, Pforta; 18, Rossleben, Convent School; 19, Zeita, Convent Gymnasium.
- c. *Government of Erfurt*: 20, Erfurt, C. and P.; 21, Muehlhausen; 22, Heiligenstadt, Catholic; 23, Nordhausen; 24, Schleusingen.
- VII. PROVINCE OF WESTPHALIA.
- a. *Government of Münster*: 1, Münster, Catholic; 2, Warendorf, Catholic; 3, Rheine, Catholic; 4, Burgsteinfurt; 5, Coesfeld, Catholic; 6, Recklinghausen, Catholic.
- b. *Government at Minden*: 7, Minden; 8, Herford; 9, Bielefeld; 10, Gütersloh; 11, Paderborn, Catholic.
- c. *Government of Arnberg*: 12, Arnberg, Catholic; 13, Brilon, Catholic; 14, Soest; 15, Hamm; 16, Dortmund.
- VIII. PROVINCE OF THE RHINE, AND THE HOHENZOLLERN COUNTRY.
- a. *Government of Cologne*: 1, Cologne, Gymnasium at Marzellen, Catholic; 2, Cologne, Gymnasium at the Apostles, Catholic; 3, Cologne, Frederic Wilhelm Gymnasium; 4, Bedburg, Academy of Knights, Catholic; 5, Bonn, Catholic; 6, Muenstereifel, Catholic.
- b. *Government of Dusseldorf*: 7, Dusseldorf, Catholic; 8, Elberfeld; 9, Barmen; 10, Duisburg; 11, Essen, sim.; 12, Wesel; 13, Emmerich, Catholic; 14, Cleve; 15, Kempen, Catholic; 16, Neuss, Catholic.
- c. *Government of Coblenz*: 17, Coblenz, Cathedral; 18, Wetzlar; 19, Kreuznach.
- d. *Government of Aix-la-Chapelle*: 20, Aix-la-Chapelle, Catholic; 21, Dueren, Catholic.
- e. *Government of Treves*: 22, Treves, Cathedral; 23, Saarbruecken.
- f. *Hohenzollern*: 24, Hedingen, Catholic.

B. PROGYMNASIUMS.

- I. PROVINCE OF BRANDENBURG.
Government of Potsdam: 1, Charlottenburg, Pedagogium; 2, Freienwalde.
- II. PROVINCE OF POMERANIA.
Government of Stettin: Demmin.
- III. PROVINCE OF SILESIA.
Government of Liegnitz: Bunzlau, Inst. of Orphan Home.
- IV. PROVINCE OF POSEN.
Government of Bromberg: Schneidemuehl, sim., (for both denominations.)
- V. PROVINCE OF SAXONY.
Government of Merseburg: Donndorf, Convent School.
- VI. PROVINCE OF WESTPHALIA.
Government of Münster: 1, Dorsten, Cath.; 2, Vreden, Cath.
Government of Minden: 3, Warburg, Cath.; 4, Rietberg, Cath.
Government of Arnberg: 5, Attendorn, Cath.
- VII. PROVINCE OF THE RHINE AND HOHENZOLLERN.
Government of Cologne: 1, Mulheim-am-Rhein, C. and P.; 2, Siegburg, Cath.; 3, Wipperfuerth, Cath.; 4, Kerpen, Cath.
Government of Dusseldorf: 5, Moers; 6, M. Gladbach, Cath.
Government of Coblenz: 7, Andernach, Cath.; 8, Linz, Cath.; 9, Trarbach; 10, Neuwied.
Government of Aix-la-Chapelle: 11, Erkelenz, Cath.; 12, Zuelich, Cath.
Government of Treves: 13, Pruem, Cath.; 14, Sanct. Wendel, sim.

C. REAL SCHOOLS OF THE FIRST ORDER.

- I. PROVINCE OF PRUSSIA.
Government of Königsberg: 1, Königsberg i. P., City Real-School; 2, the same, Burgher-School.
Government of Gumbinnen: 3, Insterburg, Real-School class of the Gymnasium; 4, Tilsit.
Government of Danzig: 5, Danzig, St. John's School; 6, Danzig, St. Peter's School; 7, Elbing.

Government of Marienwerder : 8, Thorn, Real-School classes of the Gymnasium.

II. PROVINCE OF BRANDENBURG.

City of Berlin : 1, Royal Real-School; 2, Luisenstadt Real-School; 3, Königsstadt Real-School; 4, Dorotheenstadt Real-School; 5, Frederic Real-School.

Government of Potsdam : 6, Potsdam; 7, Brandenburg, Soldern Real-School; 8, Perleberg; 9, Wittstock.

Government of Frankfurt : 10, Frankfurt; 11, Landsberg on the Werta, Real-School classes at Gymnasium.

III. PROVINCE OF POMERANIA.

Government of Stettin : 1, Stettin, Frederic Wilhelm School.

Government of Coeslin : 2, Colberg, Real-School classes at Cathedral Gymnasium.

Government of Stralsund : 3, Stralsund.

IV. PROVINCE OF SILESIA.

Government of Breslau : 1, Breslau, Real-School of h. g.; 2, the same, Real-School of the Zwinger, sim.

Government of Liegnitz : 3, Gruenberg, Frederic Wilhelm School; 4, Goerlitz; 5, Landshut.

Government of Oppeln : 6, Neisse, C. and P.

V. PROVINCE OF POSEN.

Government of Posen : 1, Posen, sim.; 2, Meseritz; 3, Fraustadt; 4, Rawicz.

Government of Bromberg : 5, Bromberg, C. and P.

VI. PROVINCE OF SAXONY.

Government of Magdeburg : 1, Magdeburg, Secondary Technical and Commercial School; 2, Halberstadt; 3, Aschersleben.

Government of Merseburg : 4, Halle.

Government of Erfurt : 5, Erfurt, C. and P.; 6, Nordhausen.

VII. PROVINCE OF WESTPHALIA.

Government of Münster : 1, Münster, Cath.; 2, Burgsteinfurt, Real-School classes at Gymnasium.

Government of Minden : 3, Minden, Real-School classes at Gymnasium.

Government of Arnsberg : 4, Dortmund, Real-School classes at Gymnasium; 5, Lippstadt; 6, Hagen; 7, Siegen.

VIII. PROVINCE OF THE RHINE AND HOHENZOLLERN.

Government of Cologne : 1, Cologne, Real-School, C. and P.; 2, the same, Real-School classes at the Frederic Wilhelm Gymnasium.

Government of Düsseldorf : 3, Düsseldorf, sim.; 4, Duisburg, Real-School classes at Gymnasium; 5, Mülheim; 6, Ruhrort; 7, Elberfeld; 8, Barmen, Real-School classes at Gymnasium.

Government of Aix-la-Chapelle : 9, Aix-la-Chapelle, C. and P.

Government of Treves : 10, Treves, C. and P.

D. REAL-SCHOOLS OF THE SECOND ORDER.

I. PROVINCE OF PRUSSIA.

Government of Königsberg : 1, Wehlau.

Government of Marienwerder : 2, Graudenz.

II. PROVINCE OF BRANDENBURG.

City of Berlin : 1, Frederic Werder Technical School; 2, Luisenstadt Technical School.

Government of Potsdam : 3, Prenzlau, Real-School classes at Gymnasium.

Government of Frankfurt : 4, Cüstrin; 5, Lübben.

III. PROVINCE OF POMERANIA.

Government of Stralsund : 1, Greifswalde, Real-School classes at Gymnasium.

IV. PROVINCE OF WESTPHALIA.

Government of Minden : 1, Bielefeld, Real-School classes at Gymnasium.

V. PROVINCE OF THE RHINE AND HOHENZOLLERN.

Government of Düsseldorf : 1, Essen, C. and P.; 2, Crefeld.

E. HIGHER BURGHER-SCHOOLS.

I. PROVINCE OF PRUSSIA.

Government of Königsberg : 1, Pillau.

Government of Danzig: 2, Jenkau, Pedagogium.

Government of Marienwerder: 3, Culm, sim.; 4, Marienwerder Frederic School.

II. PROVINCE OF BRANDENBURG.

City of Berlin: 1, Stralau, secondary Burgher-School.

Government of Potsdam: 2, Neustadt-Eberswalde.

Government of Frankfurt: 3, Crossen; 4, Spremberg.

III. PROVINCE OF POMERANIA.

Government of Cöeslin: 1, Lauenberg; 2, Stolp, Burgher-School joined to Gymnasium.

IV. PROVINCE OF SILESIA.

Government of Oppeln: 1, Kreuzburg; 2, Neustadt in Upper Silesia.

V. PROVINCE OF SAXONY.

Government of Merseburg: 1, Torgau, Real-School classes at Gymnasium; 2, Delitzsch.

Government of Erfurt: 3, Langensalza.

VI. PROVINCE OF WESTPHALIA.

Government of Arnsberg: 1, Luedenscheid.

VII. PROVINCE OF THE RHINE AND HOHENZOLLERN.

Government of Cologne: 1, Mülheim.

Government of Düsseldorf: 2, Crefeld, Cath.; 3, M. Gladbach; 4, Rheidt; 5, Solingen; 6, Lennep.

Government of Coblenz: 7, Neuwis.

Government of Aix-la-Chapelle: 8, Eupen; 9, Düren.

Government of Treves: 10, Saarlouis, C. and P.

Hohenzollern: 11, Hechingen, Cath.

II. PUBLIC INSTRUCTION IN OLDENBURG.

TERRITORY AND POPULATION.

THE GRAND DUCHY OF OLDENBURG embraces 2,417 square miles, with a population in 1861 of 295,242, of whom 191,877 are Lutherans, 72,939 Roman Catholics, and 1,497 Jews, and consists of three separate territories: the two principalities of Lübeck and Birkenfeld, (three hundred miles from Oldenburg,) and the Duchy of Oldenburg. The latter, from its historical development, divides itself into three districts: Zeerland, Munsterland, and the ancient duchy proper of Oldenburg. Thus there are five districts, each of which, besides its elementary schools, has one higher school, an institution of the State.

I. ELEMENTARY OR PRIMARY INSTRUCTION.

On the basis of Art. 82-91 of the fundamental laws, the State regulation for public schools was issued in April, 1855, which proved highly beneficial for elementary education. According to this, all matters of education and instruction are under the care of a "supreme school board," (Protestant,) which has its seat in Oldenburg, and another for Catholic schools in Vechta, both belonging to the Department of the Interior. Of the five members of each board, one at least must be from the clergy, and one from the teachers' profession. Each school commune has a special school committee, consisting of the head of the respective municipal authority, the pastor, the head teacher, and two members of the commune. The school committees of each district report to the district inspector, whose duty it is to visit each school at least once in three years; he reports to the "supreme school board," which must make regular official visitation of schools by one of its members.

Children are required by law to attend school from their sixth to their fourteenth year. When the number of children in one school rises beyond one hundred, a second class is formed; if beyond two hundred pupils a third class, etc. In schools of more than two classes the sexes may be separated and a female teacher be engaged for the class of girls; this separation has been introduced but rarely.

If children absent themselves from school, a fine of one and a quarter groschen must be paid into the school fund; parents not able to pay the fine are sometimes sent to prison. At the age of ten to fourteen years, children are dispensed from attendance at school during the Summer in rural districts.

A. SCHOOL OF ONE CLASS, UNGRADED.

SCHOOL HOURS.	Monday and Thursday.	Tuesday and Friday.	Wednesday and Saturday.
1.	I. Religious history. II. } Exercises in III. } writing.	I. Religious instruction. II. } Exercises in writ- III. } ing.	I. Reading the Bible. II. } Drawing. III. }
2.	I. Exercises in writing. II. Religious history, ½. III. Reading and writing, ½.	I. Exercises in writing. II. Biblical history, ½. III. Reading and writing, ½.	I. Exercises in composition. II. Expression of thought, ½. III. Reading and writing, ½.
3.	I. } II. } Arithmetic. III. }	I. } II. } Arithmetic. III. }	I. } Arithmetic, Wed- II. } needay. III. } Singing, Saturday.
4.	I. Reading and gram- mar. II. } Exercises in III. } position and writing.	I. Geography. II. } Exercises in com- III. } position and writing.	Female needlework, etc.
5.	I. Drawing. II. Expression of thought, ½. III. Reading and writing, ½.	I. Exercises in composition. II. } Recitation of. III. }	Female needlework, etc.
6.	I. Exercises in writing. II. Reading; grammar. III. Exercises in writing.	I. } II. } Gymnastics. III. }	Female needlework, etc.

B. SCHOOL OF TWO CLASSES.

HOURS OF SCHOOL.	LOWER CLASS. I. 6 to 8 years. II. 8 to 10 years.			UPPER CLASS. 10 to 14 years.		
	Monday and Thursday.	Tuesday and Friday.	Wednesday and Sunday.	Monday and Thursday.	Tuesday and Friday.	Wednesday and Saturday.
1.	I. } Bibl. history, Monday. II. } Recitation of songs, etc., Thursday.	I. Composition. II. } 1-2, Bibl. history. 1-2, Reading.	I. } Bibl. his- II. } tory.	Biblical his- tory.	Religion.	Reading the Bible.
2.	I. } II. } Arithmetic.	I. } II. } Arithmetic.	I. Compo- sition. 1-2, Arith- metic. II. } 1-2, Read- ing and writing.	Arithmetic.	Arithmetic.	Grammati- cal exer- cises.
3.	I. Exercises in writ- ing. 1-2, Expression of thoughts. II. } 1-2, Reading and writing.	I. Reading. II. Composition.	I. Singing, Wednes- day. II. Recitation of biblical passages, songs, etc., Sat- urday.	Reading and grammar.	Reading and gram- mar.	Writing, Wednes- day. Singing, Saturday.
4.	I. Reading. II. Exercises in com- position.	I. } 1-2, Expression of thoughts. 1-2, Mental arith- metic. II. } 1-2, Reading.	Female needle- work, etc.	Geography.	Geography.	Female needle- work, etc.
5.	I. Writing. II. Exercises in com- position.	I. Writing. II. Composition.	Female needle- work, etc.	Drawing.	Penman- ship.	Female needle work, etc.
6.	I. } 1-2, Expression of thoughts. 1-2, Drawing. II. } 1-2, Reading.	I. } Gymnastics. II. }	Female needle- work, etc.	Reading and Composition.	Gymnas- tics.	Female needle- work, etc.

According to "principles of a plan of instruction for evangelical elementary schools" the object of the public schools is: "to train children for their earthly and heavenly vocation;" and the plan of lessons includes: (a.) Religion—history of divine dispensation Old and New Testament; doctrines of faith and morals, (small Lutheran catechism;) and committing to memory passages of the Bible. (b.) Reading. (c.) Writing. (d.) German language; fluent expression of thoughts; elements of grammar. (e.) Arithmetic—the four fundamental operations; principles of forms and surfaces. (f.) Singing—church hymns; national songs, duets. (g.) Geography—national; Germany; general. (h.) Drawing—linear. (i.) Gymnastics. (k.) Female needlework, etc.

The salaries of teachers, if not amounting to a fixed sum from the fees of tuition, are completed by the State: (1.) For a regular teacher, from one hundred and seventy-five to two hundred thalers; (2.) for an assistant teacher, from one hundred and fifteen to one hundred and twenty-five thalers; (3.) for an acting assistant teacher, ninety-five to one hundred and five thalers. In addition, teachers have a free residence, garden, land, etc., and when incapable for duty on account of age they receive pensions, proportionate to their years of service, of from forty to sixty, and in rare cases to eighty or ninety per cent. of the salary.

The elementary schools have annual vacations of eight to nine weeks; the higher schools ten to eleven weeks.

Middle Schools.—Elementary schools, by introducing into their plan other branches of instruction, obtain the rank of middle schools, as those of the cities of Oldenburg and Eutin. Foreign languages are not in their programme. The regular teachers receive a salary of 700 to 900 thalers, and rent of home and garden of at least two acres; assistants from 300 to 700 thalers.

Higher Burgher Schools.—The city of Oldenburg, beside the elementary and middle schools, has a higher burgher school of six classes; the programme of studies begins in second class with French, four lessons per week; in fifth class, English four lessons; in fourth class, mathematics four lessons; in third class natural sciences two lessons; in third class, chemistry two lessons per week. From 170 to 180 pupils frequent this school; the fee for tuition is twelve and twenty thalers. The rector receives a salary of 1,100 thalers exclusive of free residence; regular professors from 660 to 900 thalers; ordinary teachers from 350 to 650 thalers. There are higher burgher schools of three classes in Schwartau and Idas, attended by boys and girls.

Candidates for teacherships at the higher schools must submit to an examination by the school board at Oldenburg.

Private Schools.—Every one who proves his qualification is permitted to establish private schools. There are higher schools for girls, all private institutions, in Oldenburg, (thirteen,) Eutin, and other places; in which both the French and English languages are taught.

Infant Schools.—The cities of Oldenburg and Eutin have also nur-

sery schools for children from two to six years, which are chiefly maintained by associations of ladies.

The Orphan House in Varel is the only one of its kind in Oldenburg, and was founded by a charitable endowment in the seventeenth century.

An institute for the deaf and dumb (in Wildeshousen) has recently been discontinued.

II. SECONDARY SCHOOLS.

For the ancient duchy and for Munsterland there are two complete gymnasiums, in Oldenburg and Vechta; for Zeverland and Lübeck, two so-called real gymnasiums, viz., at Zever and Eutin; the higher school at Birkenfeld is a pro-gymnasium and higher burgher school combined, with three classes, and gymnasial and real divisions, the first with twenty to twenty-five scholars, the latter with forty to fifty scholars. Pupils are admitted into the gymnasium of Oldenburg at the age of nine years, after they have attended for three years a preparatory school of three classes, attached to both the gymnasium and higher burgher school. The course in the lower classes (sixth and fifth) is of one year, and the four upper classes of three years each. In the sixth class Latin is begun, six lessons per week; in the fourth class they commence the study of French, three lessons per week, and mathematics two lessons per week; in the third class Greek four lessons, natural science two lessons per week; in the second class Hebrew and English each two lessons per week. The number of pupils is about one hundred and eighty; fees of tuition from twenty to thirty thalers.

In Vechta there are fifty to sixty pupils. In Zever the pupils of the gymnasium and the real school are still united in the lower classes, all learning Latin, eight hours per week. In third and second class they are in part separated; the pupils of the real school do not study Greek, and but little Latin, instead of which the modern languages, mathematics and chemistry are pursued.

Admittance to any clerical or administrative position in public office and of forestry is accorded to young men who have obtained a certificate of qualification for the first class of any of the four gymnasiums, or of final examination of the higher burgher school of Oldenburg. All other superior officers of the State or church, physicians, lawyers, etc., must obtain a certificate of maturity for the university, and have completed their professional academical course at any German or foreign university.

The following table shows the salaries, etc., of these schools:

	Rector.	Associate Rector.	Teachers.	Assistant teachers.	Administrative expenditure.	Subsidy of the State.
Oldenburg,	1,000-1,500 th.	800-1,100 th.	3 with 600-1,000 th. 4 " 400-700 "	600	1,930	3,100
Vechta,	900-1,300 "	700-1,000 "	3 " 500-900 " 2 " 400-600 "	400	400	5,100
Zever,	1,000-1,400 "	700-1,100 "	3 " 600-1,000 " 3 " 400-600 "	400	550	6,100
Eutin,	1,000-1,400 "	700-1,100 "	3 " 600-1,000 " 3 " 400-600 "	600	1	5,350
Birkenfeld,	800-1,400 "	None.	2 " 400-600 " 2 " 350-500 "	300	400	2,400

PROFESSIONAL AND SPECIAL SCHOOLS.

Among the special schools, which are wholly or in part supported by the State, are: the agricultural school of Menenburg, the trade or technical school in Oldenburg, the navigation school in Elsfleth, and two teachers' seminaries.

The Agricultural School was established in May, 1862, by private enterprise, aided by the government. The number of scholars in the first year increased from fourteen to forty-four. Tuition is one hundred and fifty-seven thalers annually.

The Trade School (mechanics' school) has for its object the better education of future mechanics; this school is not in a flourishing condition.

The Navigation School was reorganized in 1856; it has two separate classes, each giving a course of instruction of five months. The class for second mates admits young persons of sixteen years of age, who must have tried themselves at sea and possess a good elementary education, so that at the end of the five months of instruction they are able to do service as second mates on board a vessel; the laws of Oldenburg require for this service the age of twenty years and an experience on sea of four years. The class for first mates admits, from the ships, second mates of the above-named qualifications and experience, who can present good certificates in regard to their past service on vessels and pass the examination for admission, before a committee consisting of a lawyer, the teachers of the school, a mathematician, a merchant and two captains of ships. The number of scholars is generally about thirty; fees of tuition three thalers per month. Teachers' salary: for the rector from six hundred to nine hundred thalers; for each of two teachers one hundred and twenty to six hundred thalers, with a free residence.

These three institutions are under supervision of the government, which appoints a committee of inspection of three members for the agricultural school, and another for the two remaining schools.

Teachers' Seminaries.—The evangelical seminary of Oldenburg numbers above sixty pupils, who all reside in the new building erected in 1846, where instruction and accommodation are given them gratuitously, while they pay to the steward four groschen per day for their dinner.

The seminary is divided into three classes, each having a course of instruction of one year. Conditions for admittance are: age of fifteen years—examination in the branches of public school education, singing and music. The pupils remain for two years in the seminary, when they are sent away for one year as assistant teachers to elementary schools, to acquire a practical experience in teaching; after this time they return to the seminary to attend the instructions of the first class, and at the end of this term a final examination decides on their ability and qualification as teachers. The practical part of this examination consists of trial lessons and catechizing in the practice school; the theoretical part, of oral questioning and written exercises; examination is also made into their ability to sing, and play the violin, piano, and organ.

The following subjects for composition given to candidates at the examination in 1863 will show to some extent what is required :

(1.) Religion. What means "Redemption?" Why do all men need it? In how far does it originate in the attributes of God?

(2.) Composition. A journey to the Hartz—or for those who had not participated in the summer excursion: Comparison between the rivers Marsch and Geest.

(3.) Mathematics: (b.) To find the contents of a rectangular triangle, the length of the hypotenuse and angles being given. (b.) Change a given triangle into a square.

(4.) Arithmetic: Problem on average computations. The oral examination, among other things, extended on: (a.) Biblical history—the contents of the Book of Joshua, the journeys of St. Paul. (b.) In Geography—evidences of the spherical form of the earth. (c.) History—the Reformation. (d.) Botany—the family of grasses, etc.

The expenditures of the Seminary amount to 8,500 thalers per year, towards which the State contributes 6,100 thalers, and the balance is made up from the interests of the dotation fund of 48,000 thalers. The salary of the director is from 1,000 to 1,500 thalers, of the inspector 600 to 800 thalers, exclusive of free house, light and fuel; two teachers receive each from 500 to 700 thalers, and assistant teachers from 500 to 900 thalers. Expenses for administration and other matters amount to from 8,500 to 4,000 thalers, inclusive of subsidies paid to poor students.

The Catholic teachers receive their preparatory education at the Normal School of Vechta (connected with the gymnasium.) In 1860 a separate Seminary with two classes and two regular teachers, a director and assistant, was established. Pupils attend a course of two years at this Seminary, before they enter upon their practical duties. Efforts are made to extend the course of study to three years.

The director has a salary of 700 thalers, besides a house and garden; each teacher has 500 thalers; and the assistant, 115 thalers. Expense for administration is 235 thalers, and amount of subsidies 150 thalers.

There are no Seminaries in the other principalities, and candidates are at liberty to visit the Seminary at Oldenburg, or any other in Germany. In cases of poverty, the State gives subsidies to poor students who attend even foreign Seminaries, for which in Lübeck 560 thalers, and in Birkenfeld 1,000 thalers per year are regularly appropriated.

The total contributions for school purposes by the Government of Oldenburg amounted in 1863 to 70,400 thalers, (with total expenses of 1,690,000 thalers,) of which two-fifths were for superior schools.

* By the latest development in Germany, Oldenburg has been merged in the "United States of Northern Germany."

III. PUBLIC INSTRUCTION IN SWITZERLAND.

INTRODUCTION.

THE Swiss Confederation was founded on the first of January, 1818, by the cantons Uri, Schwyz and Unterwalden. In 1353 it numbered 8 cantons, and in 1513 it was composed of 13 cantons. This old Confederation of 13 cantons was increased by the adherence of several subject territories, and existed till 1798, when it was replaced by the Helvetic Republic, which lasted four years. In 1803, Napoleon I, organized a new Confederation, composed of 19 cantons, by the addition of St. Gall, the Grisons, Argovia, Thurgovia, Tessin and Vaud. This Confederation was modified in 1815, and the number of cantons was increased to 22 by the re-admission of Valais, Neuchâtel and Geneva, which after the revolution in 1848, formed the present Confederation.

CANTON.	Area. Eng. sq. ms.	POPULATION.				No. of Fed. rep- resenta- tives.
		1860.	Pr. sq. mile.	Catholic.	Protestant.	
Zurich, - - -	658.3	267,641	365.8	11,497	254,903	13
Berne, - - -	2,561.5	480,516	178.8	58,572	466,862	23
Lucerne, - - -	587.4	130,965	226.1	128,248	2,697	7
Uri, - - -	420.8	14,761	84.4	14,722	39	1
Schwyz, - - -	338.3	45,193	130.5	44,649	589	2
Unterwald, Upper, -	262.8	{ 13,399 }	{ 95.6 }	{ 13,304 }	{ 95 }	{ 2 }
“ Lower, -		{ 11,561 }		{ 11,506 }	{ 55 }	
Glarus, - - -	279.8	33,458	107.9	5,866	27,563	2
Zug, - - -	85.4	19,667	204.4	19,035	622	1
Freybourg, - - -	563.9	105,970	177.1	90,362	15,578	5
Soleure, - - -	254.6	69,527	273.6	59,799	9,626	3
Basle, Town, - - -	184.6	{ 41,251 }	{ 420.2 }	{ 9,996 }	{ 30,826 }	{ 5 }
“ County, - - -		{ 51,773 }		{ 9,324 }	{ 41,721 }	
Schaffhausen, - - -	119.7	35,646	294.9	2,080	33,489	2
Appenzell, Exterior, -	152.8	{ 48,604 }	{ 359.3 }	{ 2,243 }	{ 46,359 }	{ 3 }
“ Interior, -		{ 12,020 }		{ 11,896 }	{ 123 }	
St. Gall, - - -	747.7	181,091	228.2	111,087	69,802	9
Grisons, - - -	2,968.0	91,177	30.2	29,008	52,166	5
Argovia, - - -	502.4	199,600	397.7	88,583	104,885	10
Thurgovia, - - -	268.3	90,347	368.6	22,152	67,861	5
Tessin, (Ticino,) - -	1,034.7	131,396	113.8	131,241	115	6
Vaud, - - -	1,181.9	213,306	168.8	12,931	199,465	11
Valais, - - -	1,661.6	90,880	50.5	90,169	697	5
Neuchâtel, - - -	230.2	87,847	252.5	9,359	77,476	4
Geneva, - - -	91.3	83,340	702.5	72,365	70,266	4
Total, - - -	15,233.0	2,534,242	157.2	1,040,469	1,483,298	128

The area of Switzerland is 15,233 Engl. square miles, and the population, (1860,) 2,534,242. There are 485,000 heads of families, 465,000 (525)

possessors of landed property, and only about 500,000 having no landed possession. Of every 100 square miles of land, 20 are pasture, 17 forest, 11 arable, 20 meadow, 1 vineyard, and 80 uncultivated, being water, rocks and glaciers.

The German element is ruling in 16 out of 23 cantons, especially in the two leading cantons, Zurich and Berne. The French language prevails in Vaud, Geneva, Neuchâtel, Valais and Freyburg, and a part of Berne; the Italian in Ticino and the Grisons, and the Romansh dialect in part of the Grisons. The population speaking the German, is 1,750,000; the French, 550,000; Italian, 180,000; Romansh, 45,000.

The present constitution, the result of the secession movement of 1847-8, bears date September 12, 1848, and by it the government was essentially changed. The supreme legislative and executive authority is vested in a parliament of two chambers: the State Council (*Ständerath*), composed of 44 members, two from each canton; and the National Council (*Nationalrath*), of 128 representatives, chosen by direct election, at the rate of one deputy for every 20,000 souls.

In no country is education more widely diffused than in Switzerland, especially in the protestant cantons. The federal government contributes annually 314,000 francs, (\$68,800,) towards the Federal Polytechnic School at Zurich. This institution was erected as a monument of Swiss Union, in 1855, and forms a noble standard of the education in the various cantons, while at the same time it has exercised a great influence in elevating their preparatory schools to a uniform superior character. It possesses a philosophic faculty and 76 teachers. Switzerland has three universities, at Basle, Berne and Zurich; two academies, with theologic, jurisprudential, and philosophic faculties, 49 professors and 870 students, in Geneva and Lausanne; and superior gymnasia in all the chief towns.

Popular education is widely diffused through all the cantons; the attendance of all children over 5 years of age is compulsory. Each canton regulates its school system. In elementary schools, singing and drawing are as much obligatory branches of instruction as reading and writing. This general education shows itself in a great number of clubs for scientific, industrial, musical and social purposes, there being no pursuits to which a class of men can devote themselves, which are not represented by societies in Switzerland. The local political assemblies and other public meetings give ample employment to the newspaper and periodical press; there are accordingly 188 political journals, 167 periodicals devoted to literature and science, and 40 daily papers.

An interesting feature in the school systems of Switzerland is the recognition of the teacher in the constitution of the Cantonal Board of Inspection, and in consulting the regular association of teachers in all matters relating to the internal economy of the school.

Having lately received through the courtesy of the Swiss Consul General at Washington, (John Hitz, Esqr.,) the school codes of each canton, we shall submit entire or abstracts of several, as types of the educational systems of the republics of the old world.

SCHOOL CODE OF THE CANTON OF ZURICH. ✓

Revision of 1859.

PART I.—ORGANIZATION AND ADMINISTRATION.

I.—CANTONAL OFFICERS. A.—Director and Board of Education.

1.—*Members and their Election.*

SECTION 1. The administration of all matters of education is placed under the Director of Education, one of the members of the Governmental Council.

§ 2. The Board of Education consists of seven members, including the Director. Four of the members are directly appointed by the Governmental Council, and two are elected by the School Synod, subject to the approval of the Governmental Council. One of the latter must be a teacher of the secondary schools, the other a teacher of primary schools.

§ 3. The Director of Education is President of the Board of Education. If he is prevented from presiding over the sessions of the Board of Education, his regular deputy takes his place, and, if he is prevented, the Governmental Council appoints a vice deputy.

§ 4. The term of office of members of the Board of Education is four years. The term of three of the members expires every two years, viz: of two of those appointed by the Governmental Council, and of one elected from the teachers. The term of these three members expires always after the elections for reorganization of the Governmental Council; and the latter elects its members for the Board of Education during the summer season, and approves of those elected by the School Synod during the fall season of the respective year.

§ 5. The laws on the organization of the bureau of the Governmental Council and its branches apply also to the bureau of the Director and Board of Education.

2.—*Duties.*

§ 6. The Board of Education (State Laws, art. 70) is charged "with the superintendence of all schools in the Canton, and the promotion of popular and scientific education." Moreover, it is its duty to exercise a supreme direction of all public schools; to prepare and to propose all laws and regulations on education, and to see that they are faithfully executed.

§ 7. For this purpose the Board of Education has the necessary control over inferior school authorities, and calls an annual meeting of deputies from the District School Committees, for the purpose of deliberating with them on general matters of education. The Directors of Teachers' Seminaries attend also, and the deputies are required to render an account of the proceedings to the bodies who elected them.

§ 8. The Board of Education has power to appoint special inspectors of schools, whenever information respecting them renders it necessary, for which purpose the annual sum of 3,000 francs is placed to their credit.

§ 9. Reserving the privilege of resort to the Governmental Council, the Board of Education has power—

1.—To suspend a teacher, accused of crime, during the trial.

2.—To suspend the functions of a teacher who, by his own fault, has rendered unprofitable his further labors at a school; to appoint a substitute and fix the amount to be paid the latter from the teacher's salary. In case of disagreement on the part of the teacher, the courts decide the amount.

B.—COMMISSIONS OF INSPECTION FOR CANTONAL SCHOOLS.

§ 10. The immediate supervision over the Gymnasium, the School of Industry, the gymnastic and military exercises of the Cantonal School, the Veterinary

School, and the Seminary of Teachers, is exercised by special commissions of inspection.

These commissions are elected by the Board of Education, by secret ballot, from the names proposed by the Director of Education, subject to confirmation by the Governmental Council, which also decides by secret ballot. The approval of the Governmental Council, in case of appointment by the Board of Education of further special commissions for inspection, is reserved.

§ 11. The Director of Education has the privilege of being appointed President of any of their commissions, if he desires. But, unless he express his desire, the Board of Education appoints the President of the commission from its members.

§ 12. If the Director of Education is not a member of these commissions for inspection, another member of the Board of Education must be elected, and the Director has still the privilege of being President at their session. The term and expiration of office is the same as for other standing committees. If the Director of Education is not President of the commissions, a new election for President shall take place every four years, always after the new election of one-half of the members of the commission.

§ 14. The number of members of commissions of inspection, their duties and privileges, will be defined in the regulations of the respective schools.

II.—DISTRICT SCHOOL COMMITTEE.

1.—*Members and their Election.*

§ 15. Every district has a District School Committee, consisting of nine to thirteen members. The Director of Education fixes the number according to the wants of each district. Three members are elected by the teachers of the district, the other members are elected by the school communes of the district from citizens not of the profession of teachers. Teachers, who are members of a District Committee, absent themselves from all deliberations concerning their persons or their schools; but the Committee may consult them in reference to the latter.

§ 16. Members of School Committees are elected for the term of six years; elections to be held every three years.

§ 17. The District School Committee elect a President and Vice President from the members. The President calls a meeting as often as business may require, or on the demand of four of the members.

§ 18. They elect also a Secretary, not necessarily one of the Committee, to keep a record of their proceedings and resolutions.

§ 19. The duties of the School Committee are rendered gratuitous. For every day of visitation three francs are allowed to each member; and if any of them are requested by the Board of Education to inspect buildings, to settle accounts in dispute, etc., they receive six francs per diem.

2.—*Duties of the District School Committee.*

§ 20. The District School Committee has the supervision on all school matters in the district. For this purpose certain schools, to be changed every two years, are apportioned to each member for regular visitation. Secondary schools shall be visited by one member during two years, when he is relieved by another. The schools shall be visited at least twice in each year, during the summer and winter course.

§ 21. The Committee shall particularly inquire into—

- (a) Regular attendance of the scholars.
- (b) Discharge of duty by the teacher.
- (c) Order of instruction.
- (d) Economical and local condition.

The Board of Education will give further instruction on the visitation of schools; the members of the district enter their names and date of visitation in the visitation book of the school.

§ 22. The District Inspector shall be present at the annual examinations of the schools placed under his care. After the examination, he meets the Parochial or Secondary School Committees for consultation on the condition of the school, and renders a report to the District School Committee. After all examinations have

taken place, the District School Committee holds a session on the reports from visitation, and takes suitable action. The Secretary communicates the censures and other resolutions to the Parochial and Secondary School Committees, and sends an extract of the minutes, as far as each teacher is concerned, to the respective schools.

§ 23. All resolutions of Parochial and Secondary School Committees, in regard to selection of building lots and plans of school houses, require the approval of the District Committee; and, if adverse to the desires of the former, they can appeal to the Board of Education as the final resort.

§ 24. The District School Committee shall render an annual account to the Board of Education, after a given schedule, on the condition of schools, number of scholars, absentees, means of instruction, etc., accompanied by such proposals, desires or observations as appear suitable.

Every three years a general report on the condition of all schools of the district, their teachers, means of instruction, buildings, plans of teaching, etc., must be rendered, with a statement of what measures are considered necessary for the promotion of education.

§ 25. Finally, the District School Committee shall see that the laws on schools and the instructions of the Board of Education are properly executed, and hold the Subordinate Committees responsible in this respect. The Committee has also power to place a school under special supervision.

III.—SECONDARY AND PAROCHIAL SCHOOL COMMITTEES.

A.—SECONDARY SCHOOL COMMITTEES.

1.—*Members and their Election.*

§ 26. Each secondary school district has a Committee of from seven to eleven members; the District Committee fixes this number according to the wants of the district, and elects two of the members, and decides how many more shall be elected from each school district. The elections of the latter members are by the school communes.

All elections are by secret ballot. The teachers are advisory members of the School Committee, in all matters not pertaining to themselves personally, but they shall be informed of any resolutions in reference to them.

§ 27. The term of office for members of Secondary School Committees is four years, and the Committee elects by secret vote a President, Vice-President, and Secretary. The President has power to appoint the time of meeting, and, if required, to call an extra session on demand of three members.

§ 28. The Committee appoints a school administrator for the office term of four years, who, if not a member of the Committee, shall be consulted on matters of economy.

2.—*Duties and Powers of the Secondary School Administrator.*

§ 29. The duties and powers of Secondary School Committees are the same as those described in §§ 37 to 41; and those of the School Administrators analogous to §§ 42 to 47.

§ 30. The Secondary School Committee renders an annual report to the District Committee, as described in § 41.

§ 31. The account rendered by the School Administrator shall first be examined by the Secondary School Committee; next a copy shall be transmitted to each Parochial Committee, giving them a time of two weeks to make objections, if any they have; during which time the members of the commune may obtain a view of the account. After the expiration of this time, the Secondary School Committee, having taken notice of the objections made, refers the account to the District Committee for ratification.

B.—PAROCHIAL SCHOOL COMMITTEES.

1.—*Members and their Election.*

§ 32. Each parish has a School Committee consisting of the pastor as President, and a number of members of four at least, to be fixed by the commune. Where

The resident minister has an assistant, the Board of Education may appoint the latter as President of the Parochial School Committee. The Committee elect a Vice-President and Secretary for the term of four years. The teachers are advisory members of the Committee in all matters not pertaining to their persons; however, they shall be informed of all resolutions, etc., in this respect.

§ 33. The school communes of Fluntern, Oberstrass, Unterstrass, Cusserfhl, Wiedikon, Enge, and Leimbach, which belong to the Parish of Zurich, shall have a special committee each, of which the Teacher of Religion shall be President.

§ 34. The members of the Parochial School Committees are elected for the term of four years; the President of the Parochial Commune presides at the election. (Laws, § 19, 1855.)

§ 35. The President assembles the committee whenever occasion requires, or upon the demand of three members. All proceedings must be recorded.

§ 36. For the administration of the school fund, and the collection and disbursement of moneys, an administrator is elected by the School Committee for the term of four years; who shall be consulted on matters of economy by the Committee, if not already a member of the same.

2.—Duties and Powers of the Parochial Committee.

§ 37. The Parochial School Committee has the immediate supervision of all schools in the parish, and executes all school laws, resolutions and instructions of the superior authorities. They take all necessary preliminary measures to fill vacant teacherships, and provide for the admittance, attendance, and dismissal of scholars.

§ 38. The Parochial Committee shall see that the teachers faithfully execute all the duties of their office. If a teacher proves incapable or unfit for his vocation, they shall report the circumstances to the District Committee. On the other hand, they shall support the teacher in all laudable efforts, and see that he receive his pay and other perquisites according to his engagement.

§ 39. The Parochial Committee shall assist the teacher in measures of order and discipline of the school. The Board of Education, on the basis of the opinion of District Committees and Chapters, publishes an order of schools for the whole Canton, in which the powers of teachers in the exercise of discipline are defined. The Committee and teachers shall, as much as possible, promote the good deportment of the young, in and out of school, and they have power to take the scholars to account for misdemeanors committed outside of their family.

§ 40. The members of the Committee, alternately as they agree among themselves, shall visit the schools of the commune, to observe the manner of instruction, the causes of absence of scholars, the order in school, and the cleanliness of the children. Each visit they should record in the visitation book of the school, and whatever appears important and noteworthy in their observations, they should communicate to the Committee or its President. They should not make any remarks before the scholars.

§ 41. An annual tabular report, on the condition of each school, and such petitions or propositions as the Parochial Committee think proper, shall be made to the District Committee. Every three years a general report shall be rendered on the condition of schools, means of instruction, buildings, etc., to which shall be added all suggestions for improvement.

3.—Duties of the School Administrator.

§ 42. Under supervision of the School Committee, the property of the school communes shall be under the care of an Administrator, who keeps an account of receipts and expenditures, and sees that the buildings, etc., are kept in good state. He is required to give security for the true performance of his duties: and the school commune can grant him a remuneration.

§ 43. The Administrator shall see that the class rooms and school houses are kept clean, and properly heated in winter.

§ 44. He superintends all means of instruction belonging to the schools in common, keeps an inventory of the same, into which all additions must be inscribed.

§ 45. The Administrator shall see that all loans from the school funds are secure; he shall obtain the consent of the Committee before making any invest-

ment; collect the interest and other receipts, and pay all expenses in accordance with law and the resolutions of the School Committee.

§ 46. The moneys shall be used only for school purposes—the regular current expenses are defrayed on authority of the School Committee and the Administrator. No money shall be paid out unless provided by law, or by previous resolutions of the school commune. Purchase or sale of estate shall not take place without the consent of the school commune.

§ 47. The Administrator shall present annually to the School Committee an account, in duplicate, of all receipts and disbursements, which the Committee shall examine and compare with the vouchers, and, if found correct, transmit for ratification to the District Committee.

4.—General Provisions.

§ 48. No person is eligible for any school office, unless he be twenty-five years of age, and possess the qualifications set forth in Art. 24, State Laws: Father and son, two brothers or brothers-in-law, father-in-law and daughter's husband, cannot be at the same time members of a Committee.

§ 49. All members of Committees, and School Administrators, can be re-elected when their term expires. If a temporary election or appointment has been made, the office must be definitely filled at the next regular election, and within one year.

PART II.—SCHOOLS.

1.—CANTONAL SCHOOLS. I.—Popular Schools.

§ 50. The Popular School has the object to train children of all classes upon uniform principles, into active, religious, useful and moral men.

1.—Elementary Schools.

§ 51. All Public Schools of the Canton of Zurich are divided into eleven districts (Bezirke), agreeing with the political districts of the Canton.

Each School District is subdivided into parochial communes, (Kreise,) and each parochial commune into school communes, according to the number of its schools.

Where exceptionally a school commune extends to two parochial communes, it belongs to the one in which the school house is situated.

§ 52. The separation of a school commune for the establishment of a special school house shall take place only with the consent of the Governmental Council, which shall be granted on special grounds, and the evidence of a possession of sufficient means to fulfil all the obligations of a school commune, and only in case when the want of another school is justified, on account of distance from the first school house, bad roads, or other local circumstances.

§ 53. In order to avoid the disadvantages of schools attended by only a small number of scholars, the Governmental Council shall, whenever it is practicable, unite the smaller school communes of a parochial commune with the larger ones of the same or of a neighboring parish, or take one part of a school commune to be joined to another. In such cases all interests shall be settled on a basis of justice and equity.

2.—Duty of Attending School and Admission.

§ 54. All the children of residents of the Canton, who have attained their sixth year on the 1st of May of each year, shall be obliged to enter the school at the opening of its first course, unless they are dispensed on account of physical or mental infirmity for a longer or shorter time. No children under six years of age shall be admitted.

§ 55. The duty of attending school is obligatory to the time of admission as church members, (confirmation,) generally the sixteenth year of age. Scholars who from the day school enter a secondary school, and frequent the same during the term of two years, are not required to attend repetition schools.

§ 56. Children who do not attend the public school of the commune, but another public school, or who are instructed by private teachers, must be reported by the parents or guardians to the School Committee, which shall obtain satisfac-

tory information that such children receive instruction at least equal to that given in the public schools of the commune. The fees of tuition must be paid for such children into the school treasury, where the parents reside, as long as their obligation in law to attend school exists; however the School Committee, when the interests of the school are favorable to a withdrawal of scholars, may refund the tuition fees.

§ 57. The new annual school course begins with the 1st of May. One week previous to this date, the President of the parochial commune gives a public notice that all children of six years of age shall be admitted into school, and that parents are required to present them, together with a certificate of their vaccination.

The pastor of the parish furnishes the teachers with a list of children of the above age, the date of their birth, names of parents, etc.; and if families have been apportioned to another commune, a list of their children are forwarded to the ministers of the other parish.

3.—*Classification of Schools*

§ 58. The Primary School is divided into two parts:

(a) The day school, course of six years.

(b) The repetition school, course of three years.

Moreover, all children leaving the day school at the end of the course, unless they enter a higher school, are required to attend, during one hour per week, the singing school, which is kept on Sunday, or a day of the week, for the purpose of training good church singers. The School Committees shall take measures to secure supervision and attendance for the singing school.

§ 59. The scholars of day schools form six classes, agreeing with the six years' course of instruction. The three lower classes form the elementary, the three upper the real school.

§ 60. If it is necessary to divide a school into two classes, with two or more teachers, the approval of the Board of Education must be obtained. The employment of teachers in different classes shall be regulated by the School Committee, with due regard to the wishes of the teachers in office.

§ 61. If more than one hundred pupils attend a day school, during three years, a second teacher shall be engaged, and a second class room formed. The Board of Education has power, if warranted by special reasons, to order the formation of two classes, when the number of scholars exceeds eighty.

4.—*School Hours.*

§ 62. The number of school hours per week shall be: For the lower class of a day school, eighteen to twenty; for the next two classes, twenty-one to twenty-four, and for its three upper classes, twenty-four to twenty-seven; for the repetition school, eight hours, distributed on two forenoons, and the singing school one hour per week.

§ 63. The school hours shall be divided by the Parochial School Committee, with the approval of that of the district, and with the advice of the teacher, and the Committee shall have power to augment the number of hours for the repetition school during the winter months, at the expense of the summer months. A teacher shall not be employed in school more than thirty-five hours per week, exclusive of instruction in gymnastics.

§ 64. There shall be eight weeks per year of regular vacation, the distribution of which is left to the School Committees.

5.—*Branches and Means of Instruction*

§ 65. Branches of instruction in primary schools are—

Religious and moral instruction.

German language.

Arithmetic and geometry.

Natural history.

History and geography, chiefly national.

Singing, penmanship, dancing, gymnastics.

Female handiwork.

§ 66. The Board of Education prepares a plan of instruction, defining the matter to be taught in each department of the Primary School, and the time to be devoted to it, based on the following principles:

(a) That the day school must have, as its chief aim, to give a secure and thorough knowledge of the first elements of science; the lower classes a general understanding of the different branches, and the upper classes a more extended instruction, with a view to develop the capacity of the mind for duty.

(b) That the repetition school must connect the want of practical life with the general object of instruction.

§ 67. In accordance with the general plan of instruction, a time table shall be prepared by the School Committee, under advice of the teacher, and submitted for approval to the District Committee, in which the order of each day and hour shall be furnished for teachers and scholars.

§ 68. Method and manner of instruction shall be appropriate to the age and knowledge of the scholar, so as to promote his safe progress, and particularly a uniform development of all his powers.

a.—Instruction in Religion.

§ 69. Plan and books for instruction in religion, as well as in other branches, are prescribed by the Board of Education, but shall be submitted to the opinion of the Church Council, which acts on the recommendation of the Church Synod or Chapter. After having obtained their opinion, the Board of Education decides finally on the plan of religious instruction for the day school, while the plan for the repetition school is submitted to the approval of the Church Council. If no agreement can be had on the latter, the Governmental Council makes a final decision.

§ 70. All religious instruction in the repetition school is given by the minister of the church. If a parish has many schools, some of them may combine into one repetition school, or, if not practicable, the teacher shall instruct part of them; all exceptional measures must be approved by the District Committee, and the school hours shall not be shortened.

§ 71. Special arrangements shall be made for the schools of the Roman Catholic Churches in the Canton.

b.—Female Handiwork.

§ 72. In every parochial commune at least one class for female work shall be established. The School Committee shall provide a well lighted and airy room for this purpose, either in the school house or elsewhere.

§ 73. The instruction in this branch shall include: Knitting, sewing, repair of clothes, and cutting, etc., of new clothes. Strict attention must be given to order, neatness and economy. The scholars of the real school shall as yet not be taught ornamental work.

§ 74. All the young girls of the real school are required to attend the work classes; those of the repetition and secondary school have the privilege of attending.

§ 75. The School Committees shall request the ladies of their commune to organize themselves into work associations, for the support of the work classes, and these associations shall elect the teacher, and approve of all matters pertaining to this department.

§ 76. The immediate care of these schools, their supervision, the election of a teacher, her salary and term of office, the collection of fees of instruction, fixing of school hours, etc., rests upon the School Committee. However, the Board of Education, with consent of the Governmental Council, may issue regulations for the work schools.

§ 77. The expenses of the latter, as far as not covered by voluntary contributions, shall be defrayed from the school treasury. Where several schools have a work class in common, the expenses shall be apportioned according to the number of scholars from each.

c.—Means of Instruction.

§ 78. Means of instruction are selected by the Board of Education, (see § 69,) according to a plan including the various schools and branches of instruction. As much as possible all books of instruction are printed by the Government in order to reduce the price.

B.—EXAMINATIONS.

6.—*Examinations, Promotions, and Final Certificate.*

§ 79. Every year, at the end of the scholastic course, a public examination shall take place in all popular schools, in presence of at least two members of the School Committee. The day of examination for each school shall be appointed by the School Committee, with the approval of the district school inspector; and a public invitation shall be extended in the usual manner. The Parochial School Committee may decide whether the singing schools shall be present. The examination shall be extended to all branches of the plan of instruction, including religion, and must occupy at least three hours for an undivided day school.

§ 80. At the end of the course of instruction, the School Committee, upon motion of the teacher, decide on the promotions from the elementary to the real school, and from the latter to the repetition school; they have power to retain a scholar in the class last occupied. The promotion within the class is left with the teacher.

Final certificates are issued for the scholars upon the completion of the course of the day school, and children, passing to another school commune, are admitted in the same class as the one from which they came.

7.—*Absence from School and Obstacles to Regular Attendance.*

§ 81. All educational officers and teachers shall take measures to secure the regular attendance of scholars at school. Special regulations by the Board of Education shall indicate the necessary measures.

§ 82. Parents, guardians, and employers, disregarding the duties toward the young, in regard to their instruction, shall be exhorted, or fined, according to the "regulations for absence from school."

§ 83. The School Committees shall see that all laws and regulations with regard to children employed in factories are duly observed, and that the children are not overloaded with work or otherwise neglected; and, in case of violation, they shall proceed according to § 257, private rights.

8.—*School Houses.*

§ 84. Each school commune must have a school house; in extraordinary cases the Board of Education may grant a delay, and no part of a school house shall be used for other purposes than teaching without the consent of the District Committee.

§ 85. A residence for the teacher shall be connected with each school house, and the communes are obliged, when there is no such accommodation for the teacher, to provide a temporary residence, or pay a suitable remuneration, with the approval of the District Committee. If they cannot agree in the matter, the Board of Education makes the final decision.

9.—*Economical Condition.*

A.—CONTRIBUTIONS FROM PARENTS.

§ 86. Parents or guardians of children required to attend school, shall pay for their tuition, as per § 301, into the hands of the school Administrator. The tuition of the poor is paid from the poor fund.

§ 87. Books of instruction and writing material for the scholars are purchased by the School Committee, at the expense of the parents, at reduced prices, and with a view to uniformity. The children of the poor are furnished with them at the expense of the poor fund.

§ 88. The School Committees have power to increase the fees of tuition to double the amount, if necessary, to meet the current expenses; also to decrease the same, or the charges for books and materials, if warranted by the condition of the treasury.

B.—CONTRIBUTIONS FROM THE SCHOOL COMMUNES.

1.—*Kind of Contributions.*

§ 89. The building and maintenance of school houses (§ 84) is a duty of the school commune, unless by legal provision otherwise provided for.

§ 90. Every School Committee shall provide the necessary fuel for the class rooms, as well as

§ 91. Seats, desks, blackboards, and all apparatus required for the cleaning and heating of schools, etc.

§ 92. The School Committee shall see that teachers receive their salary and other emoluments, according to the contracts they have concluded with them.

2.—*Sources of Contributions.*

a.—*School Fund.*

§ 93. Every school commune shall have a separate school fund, consisting of—

1. All donations and foundations belonging to the commune already.

2. The fees of settlement from every non-resident citizen, and from any marriage with a party from another commune.

3. All voluntary donations and bequests.

§ 94. The School Committee shall have power to call for an annual voluntary school tax, which shall flow into the school fund, or be employed to pay tuition and books for the children of the poor, or to form a special fund for the poor.

§ 95. The School Committee shall take proper care to increase the school fund, and bring it into such condition that the current expenses may be paid from the interest.

b.—*Annual Income for Schools.*

§ 96. The following amounts flow into the school treasury :

1. The interest of the school fund.

2. Rents, etc., of estate belonging to the commune.

3. Part of the fees of settlement.

4. Fees of tuition and fines.

5. Contributions of the State not for special purposes.

c.—*Contribution of the State.*

§ 97. The State undertakes to provide for the education of teachers, their salaries, pensions, etc., as specified hereafter.

The Governmental Council may grant aid towards the building or repair of school houses, proportionate to the expenses arising and the means of the commune.

§ 98. There shall be a credit of 35,000 francs for the Governmental Council, for extraordinary expenses, for educational purposes in the school communes, or for the increase of their school funds.

II.—SECONDARY SCHOOLS.

THEIR OBJECT.

§ 99. Secondary schools have been established for boys and girls, embracing a higher course of instruction than the day school. The object of secondary schools is to confirm the instruction of primary schools, to enlarge the same within the sphere of popular schools, and to enable some of their pupils to be admitted in a superior school.

1.—*School Circles and Location of School.*

§ 100. The canton shall be divided into secondary school circles, as near as possible analogous to other divisions, not above the number of sixty. The Governmental Council has power to unite or divide school circles, if necessary.

§ 101. In each circle shall be a secondary school, which, under obligation to fulfil the requirements of law, shall be entitled to the fixed contribution of the State, (§ 121.)

§ 102. The establishment of a new secondary school shall be permitted when the attendance of fifteen pupils at least for three years has been secured, and the requisite localities have been provided, as well as the pecuniary means to secure the existence of the school. The evidence thereof shall be submitted to the Board of Education through the District Committee, and the former may consent to the opening of a new school.

§ 103. If, during several years, the number of scholars of a secondary school has decreased to eight, such school may be dissolved by the Governmental Council. In such case the teacher, unless other employment in the service of schools is provided, shall receive an annual pay for the term of six years, or a total sum by way of settlement; and for the payment of such the school fund shall be taxed, if necessary. Upon the dissolution of a school, the Board of Education makes a definite disposition of the school fund, etc., or temporary only, if a reorganization seems probable; in which latter case the contributions from the State would still increase the fund.

§ 104. The town where the school house is to be situated generally provides the necessary localities for instruction, and also the cleaning and heating thereof. Where the localities are not furnished by the town, the corporation shall be taxed in lieu, and any disputes shall be settled by the District School Committee. The duties imposed by § 305 shall be at the expense of the secondary school circle. However, the town may be required to provide a residence and garden, or farming land for the teacher.

§ 105. The commune which will undertake the conditions of the preceding § shall be the school town, yet the Board of Education has power to protest against the establishment of a secondary school at an unsuitable place, and to decide, if application is made by several communes. If no offer is made by any of the communes, the Board of Education, on proposition of the District Committee, selects the locality, and fixes the amounts to be contributed by the several communes interested in the erection of a secondary school.

2.—*Organism of the School.*

§ 106. Branches of instruction to secondary schools:

Religious and moral instruction, the French and German languages, arithmetic, practical geometry, geography, general and national history, natural science in regard to trades and agriculture, singing, drawing, penmanship, gymnastic and military exercises.

All branches are obligatory, and the Committee shall give dispensation from one or the other in exceptionable cases only.

§ 107. Instruction in other ancient or modern languages may be given with the approval of the Board of Education, who also revises the plan of instruction.

§ 108. No teacher shall be obliged to labor in school for more than thirty-three hours per week, (exclusive of teaching gymnastics.) Vacations as §§ 64 and 299.

§ 109. The full course of instruction is generally of three years; however the course of each year shall be complete in itself, as near as possible, within proper limits. The District School Committee may order a fourth annual course on application of the Secondary School Committee.

The Board of Education gives directions on the distribution and limits of the different branches of science in the different annual courses of instruction, and prepares the general plan of teaching, indicating also the obligatory text books, etc. The Secondary School Committee, in conference with the teacher, and with the approval of the District Committees, prepare the time table for their schools.

§ 110. Religious and moral instruction is generally given by a member of the ministry, who is elected by the School Committee, and receives a remuneration for his labor in the secondary school. As an exception, teachers are entrusted with religious instruction, with the consent of the District Committee. See § 69.

§ 111. Girls frequenting the secondary school may participate in the instruction of the work class, paying the usual fee of tuition. Care should be taken that they are absent from lessons only which belong less to the sphere of female education, as geometry, etc.

§ 112. At the end of the annual course a day of public examination shall be appointed by the School Committee, with the approval of the district visitator, (Inspector,) to which parents and others shall be invited. After this examination the Committee decide as to promotion of scholars to higher classes.

§ 113. The Secondary School Committees and teachers shall exercise order and discipline in accordance with the regulations, and punish all absence from school. If a scholar is absent four weeks within the year, or shows a continual

neglect of studies, or gives a bad example of behavior, he shall be dismissed the school by the Committee.

§ 114. The Committee may intrust certain branches of instruction to expert teachers; also, with the approval of the Board of Education, appoint an assistant or second teacher, if the number of pupils exceeds fifty. The distribution of lessons among teachers and assistants is done by the School Committee, with the assent of the Board of Education.

3.—*Admission and Withdrawal.*

§ 115. Every child residing within the limits of the school, and which has passed the day school, having acquired the requisite knowledge, shall be admitted into the secondary schools. Non-residents must obtain the consent of the School Committee.

§ 116. Scholars who have registered for admission in the secondary school enter the same at the commencement of the annual course. After a trial of one week, the teacher recommends either his definite admission or that he be returned to the School Committee, which may order another examination before deciding finally.

§ 117. The regular admittance is at the beginning of the course on May 1, and an entry into school after that day shall only be permitted exceptionally. However, scholars who remove from one district into another must be received at any time into the same class from which they were dismissed.

§ 118. Regular discharge from the secondary school takes place at the close of an annual course; those who leave school during that period must pay the tuition fees for the last semi-annual term.

4.—*Economical Conditions.*

§ 119. Each secondary school has a separate school fund, under the special care of the School Committee.

§ 120. The treasury of secondary schools is made up from—

- (a) The annual contributions of the State.
- (b) The fees of tuition and fines for absence.
- (c) The interest from the school fund.
- (d) Voluntary contributions from communes or friends of education.
- (e) The taxes of the communes.

Any surplus at the end of a year is added to the fund.

§ 121. The annual contribution of the State to each secondary school circle amounts to 1,050 francs. If a school has several teachers, or an assistant, a proportionate increase is ordered by the Governmental Council.

The highest tuition fee for one scholar is twenty-four francs; from this eight francs are paid to the teacher, while the remainder flows into the school treasury.

§ 122. Children of poor parents, who distinguish themselves by industry and talents, shall be taught at partial or no charge. As a rule, one free scholarship is calculated for every eight scholars. If the condition of a school permits, stipends may be granted in consideration of want of means or distance from school of the scholars.

§ 123. If the proceeds from sources mentioned in § 120, (a) and (d), are not sufficient to meet the expenditure of a school, the deficit shall be made up by a tax imposed on the communes which form the school circle. This tax is divided among the several communes, according to communal law, § 182, art. 2, and by them distributed among their members in the manner of other school taxes. The State, in cases of need, shall aid those communes who are not in a prosperous condition.

III.—SUPERIOR INSTRUCTION.

A.—SCHOOLS.

I.—The University.

1.—*Object and Organization.*

§ 124. The object of the university is to secure a superior scientific and professional education, as well as to promote and extend the entire realm of science.

§ 125. The university consists of four faculties:

1. The three special faculties—

- (a) Theology.
- (b) Political science.
- (c) Medicine.

2. The faculty of general philosophy, subdivided into—

- (a) The section of philosophy, philology, and history.
- (b) The section of mathematics and natural science.

§ 126. The university shall possess the usual academical liberty of teaching and learning, subject to regulations on the general plan of studies by the Board of Education.

§ 127. The course of the university shall take into account the wants of the age and the special demands of Switzerland.

2.—*Academic Teachers.*

a.—*Title and Appointment.*

§ 128. The body of academic teachers consists of professors and private docents. The State establishes the necessary regular and extraordinary professorships.

§ 129. As a rule the faculty of theology has five, that of political science five, that of medicine six, and that of philosophy (including the teachers of the polytechnic school) fourteen professorships.

§ 130. The Governmental Council shall have power to appoint regular and extraordinary professors, with or without salary, beyond the normal professorship, to the extent of the credit of the university; also to bestow the rank and privileges of regular professors or extraordinary professors.

§ 131. The Governmental Council, upon proposition of the Board of Education, and the advice of the special faculty or section of a faculty of the university, elects the professors of the high school. Previous to the election of a professor for the faculty of theology, the advice of the Council of the Church shall be requested.

§ 132. Men of scientific education may establish themselves as private docents of each faculty. The special conditions for their admission, privilege, and duties, shall be set forth by special regulations.

b.—*Privileges and Duties of Academic Teachers.*

§ 133. The branches of science and number of lectures for a professor shall be specified by his commission. A regular professor is generally obliged to lecture during ten or twelve hours, and an extraordinary professor four to six hours per week. Moreover, all professors are obliged to attend to the prescribed examinations.

§ 134. Each professor shall deliver a public lecture on a subject of science upon his entry into office.

§ 135. Regular professors of the university shall not occupy simultaneously the following offices:

1. Of a minister of the church.
2. In the Governmental Council, the Supreme Court, the District Court, the bureau of these courts or that of the State Attorney, nor that of State Governor.
3. They shall not engage in the practice of law.

§ 136. The salary of regular professors shall be from twenty-five hundred to four thousand francs; that of extraordinary professors, from one thousand to two thousand francs per year. Moreover, they receive from students the fees for their course of lectures, and for examinations and conferring degrees.

§ 137. The fees paid to private docents generally amount to five francs for each of less than four lessons per week, and if more, to four francs per hour. In special cases, the Board of Education may permit an increase for some lectures.

§ 138. The Board of Education shall have a credit of eight thousand francs on the budget of the State for the payment of eminent professors and private docents without salary, and also for services beyond the measure of their duties. Grants of the Board of Education in this regard shall be confirmed by the Governmental Council.

§ 139. The faculties or sections of a faculty have power to confer the degree of master of arts (doctor) on those who have given evidence of a superior knowledge, or by diploma on persons who are distinguished in science.

3.—*Duties of Students.*

§ 140. Every one applying for registration at the university, shall present a testimonial of good morals.

§ 141. All citizens of the canton shall present also a certificate of maturity.* These certificates are issued by a commission appointed by the Board of Education on the basis of a previous examination; those, however, who present a satisfactory testimonial from the highest class of the gymnasium at Zurich or that of the school of industry, shall not be re-examined. Special regulations prescribe the order of examination for students from other schools in the canton, and persons from other cantons shall be examined if they desire.

§ 142. Every student shall pay a registration fee of twelve francs into the cantonal treasury, and the annual amount of six francs towards the scientific collections of the university, in consideration of which, he shall have free admittance. Students who receive stipends shall not pay these fees. Other persons who attend certain lectures (§ 143,) without being registered as students, may obtain the privilege of visiting the collections of the university upon payment of six francs per year. For the lectures, students not enjoying stipends, shall pay the fixed amounts which are collected by the administration and delivered to the teachers, less a deduction of two per cent.

§ 143. The students of the polytechnic school of Switzerland and other persons shall be permitted to attend special lectures without registering at the university, upon payment of the regular fees; minors, citizens of the canton, shall obtain the permission of the director of education.

§ 144. Upon application of the academical senate, the director of education shall have power to dismiss students of immoral character or bad conduct. The discipline of the university shall be defined by regulations of the Board of Education.

4.—*Organization of University—Teachers.*

§ 145. The professors of each faculty or section of a faculty constitute a board, the president of which is named dean of the faculty, elected by secret ballot for the term of two years, and not immediately re-eligible.

§ 146. The regular professors and deans form the academic senate, presided over by the rector. The rector is elected from the academic senate by secret ballot for a term of two years, and his election must be approved by the Governmental Council; he cannot be re-elected immediately at the end of his term of office. The rector, as far as his perquisites do not yield six hundred francs, shall receive the deficiency from the State treasury.

§ 147. The rector, past rector, and the five deans form the senate committee, by whom the ordinary business is transacted.

§ 148. In case of absence of the rector, the past rector or the deans, in the order of the faculties, fill his place.

§ 149. The academic senate exercises a supervision over the students, and all proposals to the Board of Education in matters relating to the university proceed from it. The Board of Education cannot finally decide on the use of the revenues, nor on the standing order of instruction and discipline, without advice of the academic senate. The latter may give opinions in writing, or select two deputies to be present as advisory members in the sessions of the Board of Education.

§ 150. The order of administration for the academic senate, the duties and powers of the rectors and senate committee, are defined by special regulations.

§ 151. The Board of Education appoints a special committee from its members for initiatory consultation on all important questions in regard to the university, and also for the purpose of immediate supervision, consisting of the directors of education and two members. They advise with the rector, and in matters belonging to a special faculty with the deans of the same.

§ 152. A special credit on the budget is opened for the Board of Education, towards defraying the expenses of the university.

**NOTE.*—Certificate of maturity; a testimonial in regard to the final examination of the gymnasium, called maturity; examination, qualifying students as "mature" for the university.

5.—*Organization of the Courses of Instruction.*

§ 153. Semi-annual courses are established for the several faculties; their commencement in the fall or the spring is fixed by the director of education with regard to the beginning of the course at the polytechnic school of Switzerland.

§ 154. The Board of Education decrees the order of lectures to the faculties, in order to secure a suitable continuance in the succession of studies to the students entering at the beginning of the fall term. The faculties shall announce the lectures as called for by the instructions from the Board of Education.

§ 155. Eight weeks before the close of a semi-annual course, each faculty holds a session, admitting also the private docents, to deliberate on the most practical distribution of the lectures prescribed for the next term, (as far as not already determined by the contract of engagement or commission of the teachers,) and on the announcement of lectures left to the choice of each.

§ 156. A list of the lectures is transmitted by the faculties to the rector, who forwards the same, with his report, for approval to the director of education, (§§ 133, 153 to 155,) and provides for publication of a catalogue of lectures in the German language.

§ 157. The Board of Education determines on the beginning and close of vacations, in accord with those of the polytechnic school and with the approval of the Governmental Council, by such regulations as will best promote the object of the school and the comfort of teachers and students.

6.—*Auxiliary Institutes for the Promotion of Learning.*

§ 158. The Governmental Council provides for the establishment of clinic hospitals, (hospital and ambulatory,) upon proposal of the Board of Education and the advice of the medicinal counsellor, and appoints the number and position of all assistants required for the different branches of medical and natural science.

§ 159. The Governmental Council, upon recommendation of the Board of Education, shall have power to grant pecuniary aid to scientific institutions and arrangements which serve to train students in a superior professional degree.

§ 160. On the 29th of April of each year, the anniversary of the foundation of the university, the rector shall inform the students of the prize-questions, selected by two faculties alternately. The chief prize shall be two hundred francs in each faculty, the others sixty francs. Two years after giving notice of the questions, the distribution of the prizes in a solemn manner shall take place. The Board of Education will issue special regulations in regard to this prize institute.

§ 161. All means which serve to incite students to continued activity in their studies, shall be promoted.

§ 162. The amount for institutes described in §§ 158 to 161, shall not exceed ten thousand francs.

§ 163. An annual credit of fifteen hundred francs shall be set apart to aid the students in their expenses for the renting of halls for gymnastics, fencing, and singing.

7.—*Peculiar Economical Conditions of the University.*

§ 164. All donations and endowments by private persons or corporations for the benefit of the university, shall be specially administered under the name of "university fund."

The use of this fund, as far as not specified by the donator, shall be decided on the recommendation of the academic senate, and with the approval of the Governmental Council, by the director of education.

II.—THE CANTONAL SCHOOL.

§ 165. The popular schools are immediately joined to the cantonal school. The latter is divided into the gymnasium and the school of industry.

a.—*The Gymnasium.*

§ 166. The object of the gymnasium is, to lay a foundation for superior education, particularly to prepare for the university by means of the study of ancient classics.

The gymnasium has two divisions, the lower and the upper gymnasium, the first embracing a course of four years, the latter a course of two years and six months.

1.—*The Lower Gymnasium.*

§ 168.—At the lower gymnasium the following branches shall be taught :

Religion, the German, Latin, Greek, French languages, general and national history, geography, natural history, mathematics, including practical arithmetic, drawing, penmanship, gymnastics, fencing, (military drill.)

§ 168. The annual fee for tuition in the lower gymnasium is thirty francs.

2.—*The Upper Gymnasium.*

§ 169. Instruction is given in these branches :

Religion, the German, Latin, Greek, Hebrew, French languages, general and national history, mathematics, natural science, natural philosophy, singing, gymnastic and military exercises.

§ 170. Pupils of the upper school of industry are permitted to attend certain lessons at the gymnasium, under rules prescribed by the regulations, if they give evidence of the knowledge necessary to proceed with the class.

§ 171. Those pupils only who have passed the course of the upper gymnasium shall be admitted to the maturity examination, and respectively qualified for direct admittance to the university.

§ 172. The fee of tuition for pupils of the upper gymnasium is twenty-four francs per year.

3.—*General Regulations for the Gymnasium.*

§ 173. All branches of instruction are obligatory for the pupils, and the Board of Education shall grant exception in special cases only, not in conflict with the general plan of the gymnasium, or on account of ill health, etc., of the scholar.

§ 174. The Board of Education prescribes the order and extent of the different branches for the several classes.

B.—THE SCHOOL OF INDUSTRY.

§ 175. The school of industry has the object of training youth for the commercial or technical vocations, and to enable them either to enter directly into practical pursuits or to acquire the qualification for admittance into superior technical or mercantile institutions. It has two divisions :

1.—*The Lower School of Industry.*

§ 176. Branches for the lower school of industry :

Religion, the German and French languages, general and national history, geography, natural history and philosophy, mathematics and practical arithmetic, geometric design, drawing, penmanship, singing, gymnastic and military exercises.

The Board of Education may introduce other branches, with the consent of the Governmental Council.

§ 177. The lower school of industry divides itself into three classes, each of one year's course of instruction. A general plan of instruction defines the classification and extent of each branch.

§ 178. Scholars shall attend all lessons and branches, with the exceptions as § 173.

§ 179. Fees of instruction for the lower school of industry amount to thirty francs per year.

2.—*The Upper School of Industry.*

§ 180. The upper school of industry teaches the following branches :

Religion, the German, French, English, Italian languages, general and national history, geography, theoretical applied mathematics, applied mechanics, geometrical and technical design, natural history and philosophy, chemistry and applied chemistry, mercantile branches, free drawing, penmanship, singing, gymnastic and military exercises.

The Board of Education, with approval of the Governmental Council, may introduce other branches, if the object of the school is promoted thereby.

§ 181. The upper school of industry has three courses of teaching, the first two of one year each, the third a semi-annual course; however, the Governmental Council can extend the latter to one year. Scholars, after entering the school, are required to study according to a plan of lessons, prepared by the rector with regard to their future vocation, but they are not required to study all the branches embraced in the plan of the school.

§ 182. If these scholars have, in following the plan of their studies, any leisure hours, they shall occupy themselves during the same in the class-room, under supervision of a teacher. The expenses resulting from this supervision shall be defrayed from an extra credit of 1,200 francs per year.

§ 183. Scholars of other higher schools, and other auditors, can take part in the lessons of the upper school of industry, under the restrictions prescribed by special regulations, and shall be held equal to the scholars in discipline and instruction.

§ 184. The fee of tuition for this school is thirty francs per year; auditors pay five francs, semi-annually, for each lesson per week. Scholars and auditors attending the lessons in the chemical laboratory must pay an extra contribution of thirty francs towards the special expenses connected with the experiments.

C.—GENERAL REGULATIONS FOR THE CANTONAL SCHOOL.

1.—*Organism of the School.*

§ 185. The annual course of the cantonal school commences in the middle of April of each year. The close of the final course should be at a period when the scholars passing to the university, or the polytechnic school of Switzerland, may be admitted by the latter. The established vacations shall be of ten weeks, and the Board of Education divide them for the several seasons of the year.

A public examination takes place in each class at the end of the scholastic year.

§ 186. If a class is attended, in one or more branches, by more than forty pupils, (including auditors,) a sub-division must generally be made; in the higher classes, this division into sections may take place whenever there are more than twenty-five pupils in a class of language, or still less in a class of surveying or of the chemical laboratory, etc. The Board of Education decides on these points.

§ 187. The pupils of the cantonal schools who attend the classes in religion are excused from attendance at the weekly meetings of catechumen.

§ 188. Exercises in gymnastics and the manual of arms shall take place for the whole cantonal school. The Governmental Council, however, shall have power to suspend this rule for the two lower classes.

§ 189. All means of instruction, etc., are supplied by the cantonal treasury.

2.—*Regulations Regarding Scholars.*

§ 190. Admittance into the lowest class of the cantonal school shall be granted to children of not below twelve years of age, (§ 54,) and exceptions shall be granted by the Board of Education in special cases only. Moreover, each pupil must bring evidence of character and of the knowledge required.

§ 191. Every scholar shall pay a registration fee of six francs, (unless he has previously been admitted into another cantonal school,) and an annual contribution towards the collections of the school of three francs for the upper and two francs for the lower sections. (§ 142.)

§ 192. Scholars, who leave the school after the annual examinations are entitled to a certificate, (certificate of leave or of maturity); also those who leave during a course with permission of the convention of teachers.

3.—*Regulations Regarding Teachers.*

§ 193. The salary of teachers of the cantonal school shall be in proportion to the number of lessons per week given by them. Their definite appointment shall be for a minimum of lessons, and they are not entitled to a permanent larger

salary or pension by any temporary increase. All teachers are obliged to give additional lessons (within a minimum limit, expressed in their commission,) for a corresponding increase of salary.

§ 194. A temporary engagement generally precedes the definite appointment; however, a teacher who has been temporarily engaged during fifteen years acquires the privileges of §§ 313 and 314.

§ 195. The salary is from one hundred to one hundred and fifty francs per weekly lesson; for some branches of the higher classes it may reach one hundred and seventy francs, as regulated by the Board of Education.

The salary of military instructors is fixed by regulation.

§ 196. One half of all fees of tuition fall into the cantonal school treasury, the other half is divided among the teachers in proportion to the number of lessons and scholars. The fees paid by auditors are divided among their teachers in proportion to the number of lessons.

§ 197. All regular teachers of the cantonal school have the title of superior teacher, (*Oberlehrer*), and teachers of drawing, singing, gymnastics, etc., their appropriate title. The Board of Education has power to bestow the title of "Professor," as a distinction, upon a teacher of the cantonal school.

4.—*Convention and Rectorate.*

§ 198. The teachers of each division of the cantonal school form the convention of the same. The duty of the convention is to deliberate on the general welfare of the school, the requirements of classes of scholars, to make reports and issue certificates, and to promote the progress of science and pedagogy. They also have power of discipline over scholars, and decide, as far as they have power, all cases submitted to them by the rector.

§ 199. Each of the two divisions is presided over by a rector, assisted by a prorector, who is chairman of the convention of the lower division. Rector and prorectors superintend the order and instruction of the school, and report to the inspectors; they call and preside at the meetings of the teachers' convention, control the pupils, give necessary information to parents or guardians, and execute the resolutions of their superior authorities.

§ 200. Rectors and prorectors receive extra pay for their services, for which end the Board of Education has a credit of one thousand francs for the gymnasium, and of eighteen hundred francs for the school of industry.

§ 201. The rectors are elected by the Governmental Council, the pro-rectors by the Board of Education, from the teachers of each school, for a term of two years, and can re-elect them. Every regular teacher is obliged to accept the office, if elected for the same.

5.—*Regulations in regard to Superintendence.*

§ 202. There is a Committee of Inspection of nine members for each division of the cantonal school. Seven of the members are appointed by the Board of Education, with approval of the Governmental Council; the two others are *ex officio* rector, and prorector.

§ 203. The Committee of Inspection shall watch over the execution of the regulations and resolutions of the Board of Education referring to their respective division, and over matters of discipline and plan of instruction, and shall report on all items of importance or upon request to the Board of Education.

§ 204. The superintendence of gymnastic and military practice shall belong to a special committee of seven members, five of whom are elected by the Board of Education, with approval of the Governmental Council; the other two are both rectors, or, in case of absence, the prorectors. The duties of this Committee are the same as in § 203.

§ 205. Special regulations define the competency and degrees of disciplinary punishment of committee of inspection, convent of teachers, rector and prorector.

§ 206. A steward for the cantonal school and an attendant for the officers of the school, or both offices combined in one person, shall be appointed, and receive a suitable pay.

III.—THE VETERINARY SCHOOL.

1.—Object and Organization.

§ 207. A veterinary school is established for the purpose of training practical and efficient veterinary surgeons.

§ 208. All branches of science pertaining to this profession, and the sciences connected therewith, shall be taught in each year; chiefly—

I.—NATURAL SCIENCE, NATURAL PHILOSOPHY, CHEMISTRY, BOTANY, ZOOLOGY.

II.—*Professional Science, Anatomy, (Comparative, Microscopic, Surgical, and Pathologic,) Physiology, Exterior, Dietetic, Training of Animals, Pathology and Therapeutics, and the Theory of Surgical Diseases, Operations, Obstetrics, Shoeing, Clinic, Ambulatory Clinic, etc.*

§ 209. A hospital for animals, an anatomy, a smithing shop, and necessary collections are connected with the school.

§ 210. The complete course embraces six semi-annual terms, upon which the order of lessons has been properly divided. The regular admittance of scholars takes place at the commencement of the summer term. A public examination is held at the end of each scholastic year.

2.—Duties of the Scholars.

§ 211. Each scholar or auditor shall register his name before being admitted to the instructions of the school. Regular pupils shall participate in all the studies of the programme; auditors may modify their plan with consent of the rector.

§ 212. Scholars applying for admittance must be sixteen years of age, and present good testimonials; if from the canton, they shall generally be registered as regular pupils, subject to examination in the branches of knowledge taught in secondary schools.

§ 213. Every scholar and auditor (except § 214,) shall pay a fee of registration of twelve francs, and a fee of tuition at the commencement of each semi-annual course of twenty francs, (including the contribution for collections.) The registration fee and fifty per cent. of the tuition fee fall into the school treasury; the balance is divided among the teachers in proportion to the number of their lessons.

§ 214. Pupils of the veterinary school, who are qualified, may attend lessons at the upper school of industry or lectures at the university, subject to rules established in the interest of good order, and with consent of the Committee of Inspection; for this they pay the usual fee. The same privilege is granted to the students of these schools, with reference to lectures in the veterinary school.

3.—Teachers.

§ 215. The instructions are given by two regular teachers and one assistant. One of the regular teachers attends to the hospital of animals and its clinic, to instructions in pathology and therapeutics; the other to anatomy and physiology. Each of them is engaged for from eighteen to twenty lessons per week.

§ 216. The teacher of anatomy shall have an assistant dissector, and for the clinic, also, an assistant shall be engaged; the appointments come from the Committee of Inspection, on request of the teacher.

§ 217. A director is entrusted with the chief management of the veterinary school; particularly he shall see that the order of instruction is carried out, and that the scholars conduct themselves with propriety in and out of school. The director presides over the meetings of the teachers. He is elected by the Board of Education for a term of two years, and may be re-elected.

§ 218. The teacher of clinic receives an annual salary of two thousand francs, a residence and garden; the other teachers receive two thousand four hundred francs per year. Assistants shall receive remuneration according to the number of lessons, for which purpose a credit of three thousand five hundred francs is granted.

For the assistant director and the assistant in the clinic, one thousand francs per year are at the disposal of the board; the latter must have a room in the establishment.

For other expenditures, servant, nursing of sick animals, material, and means of instruction, etc., the annual sum of two thousand four hundred francs is placed to the credit of the Board of Education.

§ 219. From the stamp duties, (*Vichschein Stempel*), the sum of one thousand francs flows into the treasury for the veterinary school; all other receipts are from the treasury of the State.

4.—*Committee of Inspection.*

§ 220. The superintendence of the institution is entrusted to a committee of five members, which attends to the execution of the laws and regulations, and the resolutions from the Board of Education, relating to the veterinary school, and supervises the progress of instruction, the labor of the teachers, and the conduct of the scholars. On all important matters, they make report to the Board of Education, after consultation with the teachers, or on receiving their written opinion.

IV.—TEACHERS' SEMINARY.

1.—*Object and Organization.*

§ 221. The seminary has been established to train efficient teachers for the popular schools of the canton, to enable young men to become familiar with the duties, the organization, and wants of a good public school.

§ 222. Candidates for admission into the seminary must be fifteen years of age, in good health, and without bodily deformity; moreover, they should present favorable certificates in regard to their moral conduct, and give satisfactory evidence as to their attainments in the third course of a secondary school, namely: in biblical history, German language, French language, arithmetic, geometry, history, and geography; natural history, singing, drawing, penmanship. At first, scholars are admitted for three months of trial, after which the permanent admittance is granted upon the recommendation of the teachers.

§ 223. The number of new pupils to be received from the canton every year is regulated by the Board of Education; the total number shall not exceed one hundred, and gratuitous instruction shall be given them. Pupils from other parts, who obtain the permission of the Board of Education, may attend the course on payment of sixty francs per year, half of which for the treasury of the seminary, and the remainder to be divided among the teachers in proportion to the number of their lessons.

§ 224. The course of instruction at the seminary is four years. The distribution and degrees of the different branches of instruction is defined by the plan of lessons. The course shall terminate at the end of the first semi-annual term of the fourth year, and the remainder of that year be employed in a general recapitulation, with practice in teaching. The Board of Education may assign some of the students to assist teachers in their school. Eight weeks of vacation during the year are determined by the inspection.

§ 225. The course at the seminary includes the following branches: Religious and moral instruction, pedagogy, the German and French language, mathematics, history, geography, natural history, singing, music, (violin and piano,) penmanship, drawing, gymnastic and military exercise, gardening and farm work. All branches are obligatory, except music on the piano.

§ 226. All instructions shall be given with a view to the future profession of the student and the special object and organization of popular schools. Particular care should be taken that the subject matter of the plan of instruction is fully understood and digested, and the pupil practised in a proper treatment and application of the same; for this practical end the lessons in pedagogy also should be given.

§ 227. In order to institute experiments in teaching, a practice school is connected with the seminary, which, in organization and object, should be a model primary school.

§ 228. There is a boarding-house in the seminary; but pupils are not required to live in it: on the contrary, they are at liberty to find accommodation elsewhere, provided it be in a respectable family.

The payment for board is two hundred and forty francs per year for citizens of the canton, and four hundred francs for those from other cantons, for which they receive board, lodging, washing, light, and medical attendance.

§ 229. To aid students of limited means, the Board of Education has a credit of nine thousand francs, from which board at the convent, total or partial, or a sum not exceeding three hundred francs, can be granted to those who prove ability, industry, and good deportment. Free scholarships and stipends are given by the Board of Education, upon recommendation of the teachers.

§ 230. Each student receives, at the end of the course, a certificate of admission to the final examination, and the Board of Education decides the question of admittance.

Pupils withdrawing from the seminary, who do not desire to devote themselves to the profession of teaching, or who quit the same within two years after they leave the seminary, shall pay the amounts fixed at in §§ 223 and 228 for citizens of other cantons, and refund all stipends received; under special circumstances, the Board of Education can relieve them of this duty.

2.—Teachers.

§ 231. The body of teachers of a seminary consists of one director and one assistant, the necessary number of teachers for the several branches, and the teacher of the practice school.

§ 232. The director has the immediate superintendence and direction of the seminary and the practice school; he attends to the pedagogy and method of instruction, and supervises the labors of the teachers, the studies and conduct of the pupils, and exhorts them to piety and attendance at public worship; he gives instruction in each class from twelve to eighteen hours per week, and calls and presides over the convention of teachers.

In cases of absence or sickness of the director, a deputy is appointed from the regular teachers by the Board of Education.

§ 233. The director also superintends the boarding-house, and regulates the order of the same; renders to the Board of Education an account of its expenses of the past year, and the proposed expenditure made by the Committee of Inspection for the next year. In the administration of the economy of the boarding-house, he shall have the aid of an assistant.

§ 234. The director receives an annual pay of one thousand eight hundred to two thousand five hundred francs, and board, residence, fuel, light, and washing for himself and family, and the assistant, who, besides, has a fixed remuneration.

§ 235. All teachers, inclusive of the practice school, shall give the instructions in accordance with the plan of lessons and the special regulations of the Board of Education. They assist the director in the supervision of the pupils, and advise with him on all matters pertaining to instruction, certificates to pupils, their admittance and promotion, recommendations for free scholarships and stipends, and on disciplinary measures.

§ 236. A total credit of sixteen thousand francs is accorded for the salaries of these teachers, from which the Board of Education pays an annual amount to each, in proportion to their work; yet a teacher shall not be employed in teaching for more than twenty-eight hours per week. For official duties outside of the seminary, director or teachers receive six francs per day.

§ 237. The director of the seminary is elected by the Governmental Council, upon proposition of the Board of Education; the other teachers are elected by the latter; also the assistant, on proposition of the director. The appointments, except that of the assistant and the teacher of gymnastics, shall be for life; but, generally a trial term of two years precedes the definite appointment. The teacher of religion must be a member of the ministry of the canton.

§ 238. For the maintenance and increase of the library and collections, for purchase of means of instruction in the seminary or the practice school, the gymnastic course, etc., the annual sum of one thousand five hundred francs shall be set aside.

3.—Committee of Inspection.

§ 239. The Board of Education attends to the supervision of the seminary and practice school, by a special committee of seven members, which make regular

visitations and superintend the work of director and teachers, and the progress of the students; they advise on all plans of instruction, and return all reports of the director or teachers, and the recommendations for stipends or free scholarships to the Board of Education.

The director is an advisory member of this committee, and the other teachers also may be called to be present in their meetings; they shall not be present at deliberations concerning their person.

V.—AGRICULTURAL SCHOOL.

§ 240. An agricultural school has been established with the object of training theoretical and practical farmers. Connected with this school is a farm for practical cultivation. This institute is under the immediate supervision of the agricultural commission, and administered by the Department of the Interior. The latter, however, gives annual information to the Board of Education of the plan and condition of the school, and the Board of Education may, at any time, inspect the same, and submit any proposition or observation to the Interior Department.

The teachers of the agricultural school are appointed on the recommendation from the Board of Education, by whom they may be examined as to their knowledge and abilities.

B.—LIBRARIES AND COLLECTIONS.

§ 241. Professors and teachers, students and pupils of superior schools have the privilege of admission to and the use of the cantonal library, upon conditions defined by the regulations. The State appropriates for the library the annual sum of five thousand francs.

§ 242. For the management and increase of collections of art, natural and medical collections, as:

- (a) The archæologic museum,
- (b) The zoologic museum,
- (c) The collection of minerals,
- (d) The collection of geognostic and petrifications,
- (e) The physical,
- (f) Chemical,
- (g) Anatomic,
- (h) Obstetric,
- (i) Surgical,
- (k) Pharmaceutic,
- (l) Mercantile cabinets, and
- (m) The botanic garden,

The annual sum of fourteen thousand francs is appropriated to the credit of the Board of Education.

C.—STIPENDS.

§ 243. To aid young citizens of the canton, of talent, industry, and moral deportment, in obtaining a superior artistic, technical, or professional education, for which they have not the pecuniary means, the annual amount of twelve thousand francs is to be appropriated from the State budget, besides the sums provided by §§ 229 and 275.

This amount includes the annual contribution from the city of Zurich, of one thousand one hundred and sixty-six francs, to be bestowed on students of theology.

The annual sum of five thousand francs is to be appropriated in aiding poor students at the gymnasium. The Board of Education, on recommendation of the District School Committees, shall distribute these stipends.

§ 244. The above sum of twelve thousand francs shall be used in this manner: Three hundred francs as remuneration for the inspector of stipends of the university; two thousand seven hundred francs for students from the canton visiting foreign universities, and the remainder as stipends for students of the cantonal or any other university of equal rank in Switzerland.

§ 245. Stipends are granted by the Board of Education with advice of all inspectors; they amount to sums of one hundred to six hundred francs, according to the necessities of each case.

§ 246. Moreover, the Board of Education has power to grant, at the highest, four stipends to scholars of each of the four faculties of the university; fifteen stipends to pupils of the cantonal school; two stipends to pupils of the veterinary school. They can also grant free tuition to ten pupils of the lower gymnasium or of the lower school of industry.

§ 247. Stipendiaries shall not pay any fees of registration at the different cantonal schools, and no contributions towards the museums.

Assistant surgeons of the medical or surgical divisions of the cantonal hospital shall give a free attendance to stipendiaries asking for their professional advice.

§ 248. All stipends are granted for one year, and must be renewed annually.

§ 249. The immediate supervision of students receiving stipends at cantonal schools is vested in a teacher of the university, the rector of the gymnasium, the rector of the school of industry, or the director of the veterinary school, respectively, and in the Board of Education in regard to those at foreign schools. The inspector of stipendiaries at the university is elected by the Board of Education for a term of two years.

§ 250. All the officers mentioned in § 249 report on their charges to the Board of Education whenever called upon to do so, or whenever they deem necessary; and they shall attend to all instructions given in behalf of such students.

§ 251. The cantonal school administrator pays the stipends quarterly, on a written order from the proper inspector.

II.—SPECIAL LAWS REGARDING SCHOOLS OF THE CITIES OF ZURICH AND WINTERTHUR.

§ 252. Where special laws do not interfere, the general legislation preceding applies to school matters in the cities of Zurich and Winterthur.

a.—Special conditions of the City of Zurich.

§ 253. The city of Zurich forms a school district and a school commune. The mayor of the city is President of the same.

§ 254. The superintendence of the public schools of the city shall be exercised by a city School Committee, under direction of the District Committee, which are elected by the school commune, (also their President from the members,) for a term of four years, the term of one-half of the members expiring every two years. Vice-Presidents and Secretary are also elected by the school commune.

§ 255. The School Committee can divide itself into sections for the purpose of more special inspection of the various classes of schools.

§ 256. A certain number of members of the school commune shall be elected by the latter to constitute a board of advisers to the School Committee, forming thus the general committee; they shall also elect the teachers and the administrator of the school fund. The safe keeping of titles, investment of capital, etc., of the school fund, may be entrusted by the school commune to the central administration of the city.

§ 257. The compensation of school officers shall be fixed by special regulations, with approval of the Board of Education.

§ 258. All schools obligatory to parochial communes, by the present system, shall also be established in the city of Zurich. Other schools, not included in this system, shall be established only with consent of the Board of Education.

§ 259. No deviations from the general regulations for schools of the city shall be permitted, unless by special consent of the Board of Education.

§ 260. The general School Committee shall elect the teachers from the candidates examined and approved by the Board of Education; subordinate teachers can be selected by the city School Committee. All elections must be approved by the Board of Education.

§ 261. Special regulations shall be issued in regard to the position of teachers in the School Committee, the formation of a teachers' convention, and the meeting of the same.

The School Committee shall advise with the teachers on general matters of schools and education, or request the opinion of the teachers' convention, either in writing or by their deputies.

b.—Special Conditions of the City of Winterthur.

§ 262. The city of Winterthur forms a school district and a school commune. The mayor of the city shall be President of the same.

§ 263. All schools, as defined by the present system, shall be established in the city of Winterthur, and no other schools can be organized without the approval of the Board of Education.

§ 264. The school commune of Winterthur shall have the right—

1. To administer the school fund, viz: The safe keeping of titles, investment of capital, and collection of interest, through the central administration of the city.

2. To appoint the President of the city school Committee.

3. To limit the right to a seat in the School Committee to a certain number of teachers.

§ 265. The representation of teachers in the School Committee, the formation of a teachers' convention, time and meeting of the same, shall be regulated with approval of the Board of Education. The School Committee shall advise with the teachers on all general matters of schools or education, and solicit the opinion of the teachers' convention, which the latter delivers in writing, or by the mouth of two deputies.

§ 266. No deviations from the general laws on education shall be permitted without special permit of the Board of Education.

III.—PUBLIC SCHOOLS NOT PART OF THIS SYSTEM.

§ 267. Whenever communes or corporations desire to establish other schools than those provided for in this system, from public or private means, for which the aid of the State or the commune is asked, they shall obtain the consent of the Board of Education, which examines and approves the plan of instruction of such school.

Notice shall be given to the District School Committee of the engagement of teachers at these schools, that they may report the fact to the Board of Education for inquiry into their qualification.

§ 268. All schools of this kind are under official control, and this supervision shall be regulated by special instructions of the Board of Education.

IV.—PRIVATE INSTRUCTION.

§ 269. Private teaching shall be permitted within the following limits:

§ 270. The establishment of private schools of all kinds, including schools for orphans, Sunday and infant schools, etc., shall require the approval of the Board of Education, which will be preceded by an inquiry into the plan and organization of the school.

§ 271. Institutions which are in place of popular schools must give an adequate instruction to their pupils.

§ 272. Special laws shall regulate the supervision of these schools, and the rendering of annual reports as by § 268. The Board of Education has power to suspend private institutions, or interdict teaching to private teachers, if want of order or qualification comes to their knowledge.

§ 273. The Board of Education shall have power to grant aid to schools established for the more general public interest, in proportion to their importance, and to assist enterprises of communes or corporations (§ 267) for the promotion of the education of young boys and girls after they leave the popular schools.

PART III.—OF TEACHERS.

I.—As INDIVIDUALS.

1.—Education of Teachers.

a.—Education in the Teachers' Seminary.

§ 274. Teachers of popular schools are educated at the seminary. §§ 221, 239.

b.—Education of Secondary Teachers.

§ 275. An annual amount of three thousand francs shall be appropriated towards the education of secondary teachers, from which the Board of Education can grant stipends to young men of ability and pedagogic education. Those

who receive a stipend may select the superior school at which they will pursue their studies, with approval of the Board of Education.

2.—ADMITTANCE INTO THE PROFESSION.

A.—EXAMINATION.

§ 276. Whoever wants to be admitted to the profession of primary or secondary teacher, or to receive an "unconditional certificate of qualification," must pass satisfactorily an examination in theory and practice of teaching before a committee of examination. The regular examinations take place in the spring. In special cases the Board of Education can appoint an extraordinary examination.

According to the result of the examination, the candidate receives a certificate of "capable," or "conditionally capable," or he is returned without certificate. The certificate of "conditionally capable" obliges the possessor to present himself again for examination within the next four years, when he will either receive the qualification of "capable," or be rejected; he may attend again the course in the last part of the fourth year, at the seminary, within the time specified above.

B.—ELECTION OF TEACHERS.

a.—*Election of Primary Teachers.*

1.—*Preceding the Election.*

§ 277. The Board of Education immediately fills, temporarily, all vacant teacherships. The Communal School Committee, four weeks after the vacancy occurred, shall call a meeting of the members of the commune, to decide whether the temporary appointment shall continue or a definite engagement take place; if the latter, whether they shall call a qualified teacher or open competition for the place. If they conclude to extend a call, the Committee proposes a candidate, and one week afterwards they proceed with the election.

2.—*Manner of Extending a Call.*

§ 278. If the meeting have decided to call a teacher for the vacant position, the Committee shall proceed with the election; however, the meeting can also resolve to reconsider the previous resolution, and to refer the question of a call back to the Committee. In this case, the meeting may double the number of members of the Committee for this act by immediate election, and, in order to afford time for deliberation, and to receive the advice of the superior authorities, the final election shall take place within four weeks afterwards.

§ 279. If a call has been made, and the candidate does not accept the position, the commune proceeds to another election within the next four weeks.

3.—*Notice of Vacancy.*

§ 280. If the commune resolved to give public notice of the vacancy, the School Committee shall issue such notice, fixing a time of at least two weeks for receiving applications. A trial lesson may be required of each applicant, in the presence of the School Committee, and the result be laid before the commune, with an account of their proceedings.

§ 281. On the second or third Sunday after the trial lessons, the Committee shall call a general meeting of the commune, to lay before the same a list of applicants and the proceedings with regard to them.

§ 282. The commune shall then decide on the definite engagement of a teacher, or the continuation of the provisional teacher, and, if the former, proceed to the election. They may also resolve to have other trial lessons, in which case the final election shall take place two weeks afterwards.

4.—*Temporary Engagement.*

§ 283. If the commune decides in favor of continuing the temporary engagement, they shall be obliged to fill the position permanently within two years from the date of the commencement of the vacancy. Exceptions from this rule shall be granted by the Board of Education in extraordinary cases only.

5.—*Eligibility of Teachers.*

§ 284. Any member of the profession of teachers, in the canton of Zurich, who has a practical experience in teaching of at least two years, and is provided with an unconditional certificate of ability, can be elected a teacher of a primary school.

6.—*Mode of Election and Confirmation.*

§ 285. Elections are always by secret ballot. The proceedings shall be reported to the Governmental Council, who transmits the same to the Board of Education for confirmation.

§ 286. If the legality of an election is disputed, a recourse must be had without failure to the Governmental Council within the period of four days; a reply shall be given within the same time, and the acts referred to the Board of Education. The period, as per § 283, is suspended until the matter has been finally disposed of.

§ 287. If the day fixed by law for an election should fall on a church communion or festival, it shall be postponed to the following Sunday.

b.—*Election of Secondary Teachers.*

§ 288. The election of a secondary teacher shall be preceded by public notice of vacancy on the part of the Secondary School Committee, which, for all duties pertaining to the election, shall be increased to twofold its number by addition of representatives from the parochial school communes. Applicants may reside outside of the canton of Zurich.

§ 289. If the committee prefer the temporary engagement of a teacher to a definite election, they must apply to the Board of Education, who will make a provisional appointment. Provisional teachers enjoy all the rights of permanent officials, and the temporary appointment cannot proceed beyond two years. Assistant teachers for secondary schools are appointed by the Board of Education.

c.—*Election of Teachers at Superior Schools.*

§ 290. Public notice shall be given of all vacancies at the superior cantonal schools, for the purpose of free competition. However, the Committee of Election (see § 292) has power to extend a call, instead of proceeding to an election.

§ 291. Applicants for teachers at the cantonal school, the veterinary school, and the teachers' seminary, shall give a trial lesson, and submit to being examined, unless there is other satisfactory evidence of their capacity.

§ 292. The Board of Education, with two members from the commission of inspection of the particular school, form the Committee of Education, and shall have power to fill vacant positions at the cantonal and the veterinary schools, and the teachers' seminary, either definitely or temporarily. The members from commissions of inspection have the same vote as those of the Board of Education.

§ 293. The election of professors of the university is prescribed by special regulations, §§ 128 to 132.

III.—SUBSEQUENT EDUCATION OF TEACHERS.

§ 294. Teachers, chapters, and conferences regulate the subsequent studies of teachers, by regulations on order and organization of the same, as specified hereafter.

§ 295. The Board of Education offers annually a prize question for all popular teachers and candidates. The prizes are from twenty to sixty francs, and a credit of three hundred francs is set apart for this purpose.

IV.—PRIVILEGES AND DUTIES OF TEACHERS.

§ 296. All teachers in the canton of Zurich, unless otherwise appointed by law, hold their positions during life.

§ 297. Every teacher who accepts any other public office or employment, except that of a member of the Legislature of Switzerland, of the Governmental Council, of a jury, of a Committee on Election, or of the Board of Education; and every teacher who accepts an agency, etc., must obtain the permission of the Board of Education or resign his position. A consent given may be withdrawn, if the school suffers by the additional duties.

§ 298. Any other employment not suitable for the position of a teacher, or any other duties taxing the teacher's time to the injury of the school, shall be prohibited.

§ 299. Teachers of general public schools shall obtain the consent of their School Committee for any intermission, and always give them information of any regular suspension of school. They shall also communicate to the School Committee their observations on special wants of the school, and direct all complaints to them.

V.—ECONOMICAL CONDITION OF TEACHERS.

A.—PRIMARY TEACHERS.

§ 300. Teachers at primary schools are classed as follows:

- (a) Engaged definitely for life by the communes.
- (b) Provisionally appointed by the Board of Education.
- (c) Assistants appointed in case of sickness, etc., of the regular teacher.

§ 301. The legal income of teachers is—

(a) For a teacher engaged definitely from the commune:

1. Two hundred francs yearly salary, a free dwelling, garden land, a certain quantity of wood, or, in place of the latter items, a suitable remuneration.

2. Three francs per year as fees of tuition from each pupil of the day school, and one and a half francs from each pupil of the repetition school, etc.

3. An annual contribution from the State, to complete the salary, (as per 1) of teachers of four years' service to five hundred and twenty francs, and of those of above four years' service to seven hundred francs; and for definitely engaged teachers of twelve years' service, further additions of one hundred francs for the thirteenth to eighteenth year of service; of two hundred francs for nineteen to twenty-four years of service, and of three hundred francs after the twenty-fifth year of service; the years of service to date, from the first employment as teacher in the canton of Zurich, not counting any intermission except when they were the result of the teacher's conduct, upon which point the Board of Education will decide.

(b) For an assistant teacher, ten francs per week, not excluding vacations, to be paid by the teacher.

§ 302. The commune shall furnish the fuel necessary for the school-rooms and keep in repair the school-house and teacher's residence.

§ 303. Salary and fees of tuition shall be paid the teacher quarterly by the school administrators.

Additions, as § 301 (a) 3, are fixed annually by the Board of Education, and paid quarterly also.

§ 304. If the regular income of teachers should exceed the amounts, § 301. no deduction shall be made. The communes may grant additional amounts to their teachers.

B.—SECONDARY TEACHERS.

§ 305. The income of secondary teachers shall consist of—

(a) An annual salary of at least one thousand two hundred francs, payable quarterly by the secondary school administrator.

(b) One-third part of all fees of tuition, (§ 120.)

(c) A free residence, garden-land, etc., as § 302.

(d) Additional pay from the State of one hundred francs after seven to twelve years of service; of two hundred francs after thirteen to eighteen years; of three hundred francs after nineteen to twenty-four years, and of four hundred francs after the twenty-fifth year of service, for teachers definitely engaged, (§ 301.)

Assistant teachers shall receive at least eight hundred francs per annum, or more, in proportion to their services, (§ 304.)

c.—Teachers of Superior Schools.

§ 306. The salary of teachers of superior schools is fixed by law, § 136, etc.

d.—General Regulations.

§ 307. If teachers, during a temporary illness, need an assistant, the State grants them an additional pay, a part or the entire amount of the assistant's remuneration.

§ 308. The family of a deceased teacher shall continue to receive the salary or amount of pension for six months from the day of his death, and the State pays his temporary successor during that time.

§ 309. All teachers of popular and superior schools are exempt from service as firemen, watchmen, etc.

§ 310. All public teachers of popular schools shall be members of the teachers' association for widows and orphans; the same with regard to teachers of superior schools, as soon as a similar fund will be established for their widows and orphans.

VI.—RESIGNATION AND WITHDRAWAL.

a.—Withdrawal of a Teacher.

§ 311. Every teacher who wants to withdraw from his engagement in any school, shall present his petition to the Board of Education. A withdrawal generally should take place at the close of a winter's or summer's course, four weeks before its taking effect.

§ 312. Teachers who want to withdraw from the profession, shall be struck from the list of teachers, unless they resume their vocation within the space of three years, when they shall generally pass a new examination.

b.—Pensioning of a Teacher.

§ 313. Teachers who, after thirty years of service, desire to be pensioned, for reasons of age or health, shall receive, with the approval of the Board of Education, from the State, an annual pension to the amount of at least one-half of their former fixed salary. The Board of Education may also pension a teacher without his petition.

§ 314. Teachers, also, who, from other causes not of their own fault, are unable to attend to teaching any longer, shall receive a pension of the same amount as in § 313, if the Board of Education resolves upon their pensioning; or a total sum to be fixed specially, according to circumstances, if their petition for withdrawal is offered by them.

II.—AS CORPORATIONS.

a.—Chapters and Conferences.

§ 315.—The teachers of a district and the candidates for teacherships of primary and secondary schools, form a district chapter of teachers. The Board of Education has power to excuse teachers who, at the same time, labor at superior schools from attending the Chapter. The director and teachers of a seminary, and the teachers of the practical schools, shall make periodical visits to the district chapters, and the president of the chapters shall inform the director of the seminary of time and place of their meeting and the order of proceedings.

§ 316. Chapters arrange theoretical and practical exercises in teaching for the improvement of their members. They give to the Board of Education their opinion on plans of instruction, the introduction of new means of instruction, and all important matters of organization. The chapters elect their officers, deputies for the prosynod, members of the District School Committees, etc., and review all accounts regarding synods, libraries of chapters, reading-rooms, etc.

§ 317. Four regular meetings of chapters shall take place in each year. For the purpose of more perfect practice in teaching, the chapters may divide into sections and keep more frequent meetings.

§ 318. The officers of a chapter are President, Vice-President, and Secretary; they are elected for a term of two years, and the Board of Education, the District and Parochial School Committees shall have information of their election.

§ 319. All elections in the chapter are by secret ballot.

§ 320. Chapters shall return a report on their labor and the proceedings of sections to the Board of Education.

§ 321. Each chapter shall receive annually the amount of sixty francs for increasing their library, and forty-five francs for minor expenses of their President.

6.—*School Synods.*

§ 322. The members of all chapters and the teachers of the cantonal and superior schools of Winterthur compose the school synod.

§ 323. The members of the Board of Education, of the commissions of inspection of the cantonal school, and the teachers' seminary, and the members of District School Committees, are advisory members of the school synod. The Board of Education must be represented at the sessions of synod by two members.

§ 324. The school synod deliberates on all means for the promotion of public instruction, and on all propositions for the modification, etc., in school matters, which are presented by them to the proper authorities. A lecture on a subject of education announced in the public invitation, shall be held at the meeting of the school synod, where they shall receive copies of all annual reports of the Board of Education to the Governmental Council.

§ 325. One regular meeting per year shall be held by the school synod; all special meetings shall be called by the Board of Education at their own instance or that of the resolutions of four chapters.

§ 326. The proceedings of the synod shall be public.

§ 327. The synod elect their officers for a term of two years by absolute majority, viz: a President, Vice-President, and Secretary.

§ 328. A prosynod is organized previous to the meeting of the synod, from the President of the synod, the deputies from chapters, one deputy from the university, one from the gymnasium, one from the school of industry, and a deputy from the superior schools of Winterthur.

The two members of the Board of Education and the director of the seminary are advisory members of the prosynod.

§ 329. The prosynod decides on the order of proceedings at synod, and no subject can be introduced in the synod unless approved by the prosynod.

§ 330. An extract of the proceedings of synod shall be published, and a copy furnished to each actual and advisory member; the publication of discourses or reports made in synod may also be ordered, and the expenses resulting therefrom will be paid by the State.

CONCLUSION.

§ 331. These laws shall take effect from the beginning of the scholastic year 1860-61, and all former laws not in accordance with these present, are hereby repealed.

ZURICH, December 23, 1859.

THE GOVERNMENTAL COUNCIL

IV. SCHOOLS AS THEY WERE IN THE UNITED STATES

SIXTY AND SEVENTY YEARS AGO.

Fifth Article.

LETTER FROM SAMUEL W. SEXTON,

Assistant Superintendent of Public Schools, New York City.

DEAR BARNARD:—In response to your urgent and repeated requests that I would jot down reminiscences of my schools and teachers at about the beginning of the present century, you will receive herewith, in my own manner, some inklings of one who has long struggled for the improvement of primary education in his native city, performing his humble part, if no otherwise, with earnestness and patience. Born in New York, the 23d of January, 1789, my fifth year found me at an old-fashioned "Dame's School," in a nook of old Beaver street, the docile pupil of a kind-hearted, gentle, old lady, Mrs. Douglass, who kept school in her own sitting-room, with every accompaniment, neat and pleasant. She had a half-crazy son that walked the streets, whose infirmities occasioned us at times some impressive moral lessons from his careful and tender mother—impressions of tenderness and compassion which were afterward revived at another school, by the use of a reading book containing a similar tale of pathos, called "Crazy Samuel," from the French of Berquin. At this, my *first* school, the means of instruction were, "The Horn Book," and the first pages of Webster; while spectacles on nose, the strap in the lap, and premiums of ginger-bread, were all the apparatus that quickened our early development,—sensible woman!

My next school for a year, was the Parish School of old Trinity—"Master Youngs"—a man of stern severity, but otherwise a good teacher. The continuance of Webster and writing copies was the only advance at this school. Here the penalty of "erring humanity" was strict and uniform. It was a small ladder inclined beside the teacher's desk, which the culprit climbed, and the severest application of the cane followed, after the manner of Dr. Busby, as expressed in the time-worn motto, "Rod in pickle," &c. I may say, by the way, that though attending schools of the severest discipline, I was never punished in any way, neither at school or elsewhere. I was a general favorite with my schoolmates, and never made battle with any, so that I may vaunt the title of "the great *unstruck*." Master Youngs' school house is still in the rear of Trinity church-yard, near the corner of Rector street—a comfortable, solid, brick building, with a small cupola and a bell. The school hall was the entire upper floor, with five windows in front, and others in the rear, thus affording plenty of air and light, two of the most essential requisites for the school-room.

After the Parish School, part of my seventh and my eighth year was spent at the advanced school of Mr. Best, a school-master of good character and

standing, who afterward wrote a history of the city—descriptive and statistic—a volume of some size. The school house was a yellow wooden building, one of a row of solid slightly private dwellings of brick, not far from Rector, in Greenwich street. I have no fables to tell of poor school-houses. All the schools I have attended were held in commodious buildings, and well appointed in most respects. Mr. Best occupied the lower part of the house, and the school was held above, occupying the whole upper floor. This was the custom of the day; even the first merchants had their stores and offices on the lower floor—dwelling above. It was a pleasant, well-lighted and airy room, and well appointed in furniture for 1796. Here “Webster’s spelling-book” was continued to “Baker and Dominion,” that being the preparatory step to commencing to read. Thence we spelt successively to the end; with the often puzzling test of spelling across the columns, thus: *Ti-con-de-ro-ga, Sag-a-de-hoc, Mich-il-li-mack-i-nac*, repeating every syllable as if one word, till the last, long repetition of the syllables of the three words, was as the vespertine chimes of old Trinity bells that used to close up Saturday of the week. Writing was continued from pot-hooks and trammels to copies. Arithmetic was now begun; “Dilworth” was the text-book. The most that was remarkable about it was, as I recollect, that his likeness, most coarsely engraved, and frightfully ugly, was both on the cover and opposite the title page. It was drawn pen in hand, with “cap and tassels,” the pedagogue’s costume, and the following doggerel distich beneath it:

“Dilworth, the man, by gracious Heaven designed
The friend and father of the human kind.”

I have often laughed over the caricature, whilst the other boys repeated, as if in contrast, their *experience* of his friendship as expressed in the following couplets:

“Multiplication is eczation,
Division is as bad,
Tare and Tret, it makes me fret,
And Practice makes me mad,”

—all the while wondering where was the humanity and friendship, in preparing such hard examples to puzzle our youthful brains. Such were our criticisms and childlike opinions of this venerable “*friend of the human mind*.” Besides the few scraps from Webster, our reading was from Berquin’s “Looking Glass,” a translation from the French. The author was a juvenile writer of equal skill with Miss Edgeworth, with the advantage of not being so entirely void of the unction of Scriptural truth. It contains a series of short, moral stories, on the passions, anger, pride, cruelty, &c. I think it would be serviceable to primary schools to revive this old book; also Miss Robins’ “Introduction,” and the “Popular Lessons,” which largely extract from such writers, in the German and the French. To the plastic influence of Berquin’s “Looking Glass,” I think I owe much of the formation of my character, though only read at the end of my seventh year. Thus closed my profitable course of instruction under the care of Mr. Best.

My father dying in ’98, (my mother having died in ’94,) I was left in the guardianship of an elder brother, and was sent, in October, 1798, to the Episcopal Academy, at Cheshire, Connecticut, fourteen miles from New Haven.

Here the Rev. Dr. Bowden was principal, who was afterward Professor of Belles Lettres in Columbia College. The Rev. John McVickar, who was then his pupil and my companion, succeeded him in that professorship, and, I believe, still continues in it. The Academy at Cheshire was a preparatory collegiate school of good reputation, and still is so. It has sent forth some honored names. The school-house was a slightly building of brick, with a fine play-ground around it. It had two large rooms on the lower floor, divided by a hall. The whole upper floor was a recitation and assembly room, for lecturing, &c. The stairs was outside, to save room. I here commenced grammar and geography, with Latin and Greek. The-text books in course were: "Cordery," "Erasmus," "Cæsar's Comments," "Virgil," "Cicero," and the "Greek Testament." In geography, our only maps were on the globes, together with those interleaved in "Guthrie's Geography." I think this book an excellent model for a text-book for this study. It was very full on the doctrine of the spheres, and the text was divided into descriptive and physical geography—climate, soil, rivers, mountains, productions, curiosities, religion, and history—quite particular and full under each head. Morse's was then, I suppose, extant, but I do not remember to have seen it. In this study we had a very practical plan; that of writing occasional compositions of supposed voyages, describing varying circumstances, products, exports, manners, and customs, &c., of the places visited. I well remember how I once prided myself on a fine flourish in one of these compositions, describing an evening at sea in the Levant. I gave it thus: "And an halo round the moon gave indications of an approaching storm." Having been praised for this, it was often repeated on the play-grounds with many a rhetorical flourish. We here used "Murray's English Grammar," and for reading books, (again) "Berquin's Looking Glass," with the "English Reader," and "Sequel," of Murray. These latter are excellent books as tests of elocutionary skill. They contain judicious selections from the pure wells of our English classics; the chaste and pure style of Lord Chatham, Addison, &c.; and is all of the highest moral standard. I think there is nothing like them for these purposes; but from their high order of literature, they are not sufficiently progressive for teaching to read, but excellent for practice at the close of the rhetorical course. "Blair's Lectures," I think, was used with these reading books. You will, perhaps, be somewhat surprised to learn that we had dramatic exhibitions, fall and spring, consisting of five act tragedies and comedies, with other dramatic varieties. Myself and a son of the Rev. Bishop Jarvis, afterward a minister, performed the female parts, in full costumes, curled and powdered wigs, ostrich feathers, jewelry, &c.—rather presumptuous this for "the land of steady habits." Think of boys, from eleven on to thirteen, personating Jocasta, in the play of "Oedipus;" "Irene," in Johnson's tragedy; the Lady, in Milton's "Mask of Comus," and Miss Harcastle, in Goldsmith's "She stoops to conquer," which was performed "*Tony Lumpkins*" and all. These female characters, and others, were performed entire by me, winning applause from a select adult audience from New York, New Haven, and elsewhere. In the present fast age, such things would surely prove a destructive wild-fire, and should by no means be ventured; yet from these classes, I remember we had in after life, many worthy men, ministers of the Gospel, and useful Christians. The counteracting influence of the moral elements of the day must have neutralized the poison. The method of teaching here was the usual course of tasking, and say-

ing lessons; teaching more from the book, than through the teacher. I think Dr. Bowden left in 1801 for Columbia College. This movement produced quite a revolution in affairs at Cheshire, by the introduction of Dr. Wm. Smith, a man of rare qualities and tact for teaching; also governing well. He brought with him philosophical apparatus which he proposed to use in the school. The trustees, however, would not permit it, thinking it would interfere with the classical studies. But our "John Smith," we may call him so, embodied the best qualities of all the Smiths, gold, silver, and iron, and was firmly bent on introducing the natural sciences, if he could; so he compromised with the trustees, who put up for him, in the school-room, a closet for the apparatus, and permitted him to give at the academy after church on Sunday afternoon, a course of practical lectures on "Natural Theology," bringing in the use of apparatus to illustrate, which was entirely successful. No summer languor, nor pinching cold of winter, could ever lessen the interest of these Sunday lessons. It was our most intellectual training; and I suppose laid the corner-stone of my after love and zeal for the natural system of mental training, which I used to familiarly call with our own teachers, "*exegetical gymnastics*," the teacher himself being really the book, by the use of the crayon and black-board, with natural objects, and of right apparatus, almost repudiating books, except for the reading course. How such lessons expand and develop the mind, pressing home truth and purity to the heart, and as in our case, gave strength and body to the faith of the young disciples of this Gamaliel, at whose feet they so cheerfully sat learning things, possibly otherwise to be always hidden. I shall never forget the lesson and its illustrations on the beneficence of God; His wisdom and power in creation by appointing the intercourse of nations. The ocean for a highway; the camels for the desert; and the sure-footed mule for the mountain passes; and the favoring trade-winds to facilitate commerce. A machine was improvised for the occasion which successfully illustrated the phenomenon. It was like the usual thread-winder, called in Connecticut, "a swift;" two cross pieces on an upright, with sockets, or places for candles on their ends. These were each backed by a piece of tin, acting as a sail, another piece being placed eloping over the tops of the lights; it rested on the upright by a thimble for a socket, when on lighting the candles it immediately rotated with considerable force. We thus understood that the sun's heat was the cause of wind, and that these winds were caused by his track across the torrid zone to his tropical limits, producing the north-east and south-east trades. Such methods of teaching need no system of mnemonics to fix it in memory. You see the particularity with which I present it you after almost seventy years. Before old Yale (I believe) had broached the subject of Geology, we had at Cheshire Academy a wooden box filled with elemental stones arranged and classified, teaching us that the stones had names and were useful, and that the earth was a store-house of treasures for the comfort and use of man.

Fifty years after leaving this school, I was consulted on making the first alterations in the school-room of this academy. Everything remained as of yore, and I for the first time enlightened the then trustees, as to the use of the closet so awkwardly in the way. The former trustees not patronizing the natural sciences, never had had it painted, and thus fifty years after, it testified of the fact. At that time they had a traditionary knowledge of the box of minerals, and its having been thrown away as useless, they wondering why stones should

be so nicely packed away and cared for. Thus it was that our loving mother Nature—our true Alma Mater—was treated by vulgar and gothic hands. At my first visit I found the old academy in a good state of preservation, it having been painted several times; all else remained as of old. The youngest daughter of the pious old cooper with whom I had resided almost seven of the longest years of my life, had married an Episcopal minister, and now occupied the old homestead. Here I staid a week amidst the haunts of my childhood, that had 'ere now become a dream-land, and there I again drank precious drafts from the very self-same

"Old oaken bucket, the iron-bound bucket,
The moss-covered bucket that hung in the well,"

and chatted of the pleasant past with those who were familiar with the "forms and saws" of the by-gones of fifty years ago! A privilege allowed to but few in this uncertain pilgrimage of life. The seeming eccentricities and advancing years of Dr. Smith, I suppose, brought about a separation from his charge; and one of the tutors, the Rev. Mr. Bronson, a most worthy man, and a good scholar, was appointed in his place, shortly after which I left Cheshire for Newark, New Jersey, and made my valedictory to the dear old academy with the reputation of having passed through Yale College; at least, so thought a Reverend Divine who one day introduced me to a friend of his, as an "alumnus of Yale and an apostle of the Sunday School." The latter, with some qualifications, I might have approximated to; but as for the Doctorate, I could lay no claim to it. To stand under the shadow of so great a name as old Yale, not having ever been even under the shade of its ancient and noble elms, nor ever having entered its honored porch, for I left my unfinished studies from my school at Newark for a voyage round the world. Thereafter, my knowledge being picked up at odd times, but not in any sufficient quantity as to entitle me to even A. M., much less to D. D.—those "semi-lunar fardels," as those appendages were called, by one declining a Doctorate from some noted College in 1809. As I told you, I left the pleasant, retired, and quiet village of Cheshire, for the more bustling and aspiring town of Newark, New Jersey, a guest, through his kindly hospitality, of Col. Samuel Ogden, a relative of the family. The town was then noticeable for its manufacture and trade in shoes, and a well ordered academy, comprising a high school for girls, and a classical department for boys. The father of the late Wm. C. Woodbridge, of "The Journal of Education," was, I think, the principal of the girls' school at this time, and the boys in charge of Mr. Finley, an Irish gentleman with a very broad brogue. He was a ripe scholar, and of most exquisite humor and good nature, and withal a strict disciplinarian, administering his penalties with the cane, on the hand, and over the shoulders, and occasionally, with a short, sharp rap across the knuckles with the usual cry of "Ah! Monsheer." His punishments were administered without counsel; with Platonic dignity, yet with seeming good nature, sometimes with such ridiculous expletives and remarks, as often irresistibly brought sunshine and rainbows through our tears from the smarting rod. The *feru's* was the only instrument of punishment at the Cheshire academy. It was Judge and Jury, most summary and severe. The handle was about nine inches long, with a circular spatula an inch or more in thickness, and about two inches in diameter to compass the palm of the hand. To my own knowledge, as an

observer, it was often unjustly administered, and at all times with undue severity, with great gravity, and no seeming sympathy, while our pleasant Milesian, at the Newark academy, blended smiles with an expressive sobriety of look, that seemed to say that he was *sorry*, but felt that it *must* be done, and the culprit forgot and forgave, yet still remembered the smart of the cane, while the more severe impressions of the ferule was keenly felt, and long remembered; though sometimes suffered with indifference, and even hardihood, as a necessity. How well I remember the daily study of our lessons, round the burning hickory logs in the great Elizabethan fire-place, at the evening hour after supper; and when learning tasks was done, you might have heard the many and sarcastic rounds of jeers about the *old ferula*, as they began to smoke their hands in the chimney among the bacon and dried pumpkins, preparing for thanksgiving, while they, with no thankful spirit, thus prepared daily their roughened hands, to endure philosophically the severe blows of the ferule to-morrow, and were, as I now think, hardening both hands and heart. It was, after all, well meant on the part of the teacher, as my experience has since taught me, being administered with good intent. It was but the spirit of the pedagogue, begotten as a habit, which argued itself into a necessity, intending well, but surely mistaken; for Dr. Bowden, off the platform, was ever gentle, kind, and pleasant, and only donned this cold and repulsive manner when elevated on his rostrum, so that one might wonder whence came such seeming austerity to those under penalty. In correcting the errors of the lesson, the contrast between the two was broad and marked. The one with austere look and the heavy weight of the ferule sustained his authority, while the other did it with a smile, exclaiming, "Pardon a mouse, silver plate;" by interpretation, "*Pardonnez moi si vous plait*." This was at first accompanied with a gentle touch of the cane. But should the error be repeated, a sharper one over the knuckles, with "Ah! Monsheer," when again a healing smile followed it, seemingly in the best humor of Irish good nature,—a system of mnemonics this, that could but strengthen the memory. Thus was spent my latest school days. Our classical lessons were now all reviewed, and I was about to open old Homer, when I received a summons from home to commence life in earnest! and part of the years 1806 and 7 was spent on a trading voyage in the Straits of Malacca, and four months residence in Canton, preparing for the then lucrative office of an East India supercargo. I returned after fifteen months, and soon after commenced a clerkship in "The New York Bank." Thus far—"the *first installment*,"—in which I think I decidedly remain your *obedient* servant, and otherwise, truly yours,

28 UNION SQUARE, N. Y., 15th Oct., 1867.

S. W. SETON.

VI. CIRCULAR RESPECTING ACADEMIES AND OTHER INSTITUTIONS OF SECONDARY EDUCATION.

U. S. DEPARTMENT OF EDUCATION,
Washington, D. C.

*To the President of the Board of Trustees, or the Principal of Incorporated
Academies and other Seminaries of Secondary Education*

The undersigned will be happy to receive a copy of any printed document, and such other information as you may find it convenient to communicate respecting your institution in any or all of the particulars specified in the following Schedule.

HENRY BARNARD,
Commissioner of Education.

I. NAME, LOCATION, AND SPECIAL OBJECT.

II. HISTORICAL DEVELOPEMENT.

A. 1. When, by whom, and for what avowed objects the Institution was originally established; date of Incorporation, with names and residence of incorporators; first opening—date of, and condition at the time as to

2. Endowment—productive funds.

3. Grounds—Building, and material Equipment.

4. Instructors.

5. Departments and Studies in each.

6. Students—Male, Female, Total.

Classical.

English only.

Non-Resident.

7. Boarding Arrangements for non-resident Pupils.

8. Religious Instruction.

9. Health and Physical Culture.

10. Discipline—its principles and methods.

11. Societies for Debate, Library, &c.

12. Tuition.

13. Terms—Vacations—Daily Routine—Public Exhibitions—Prizes.

B. In giving the chronological developement of the institution, specify

1. Any change in the original object of the institution, or the constitution or policy of the Board of Trustees.

2. The date and object of every benefaction, with the conditions attached, by the donor, especially to those in aid of indigent students, and any circumstances to show the value and the wise management of the benefaction.

3. The manner in which funds were raised to provide for the extension, repairs, and equipment of the buildings, the enlargement and ornamentation of the grounds, and the supply of apparatus, &c.

4. The peculiar qualifications of each Principal, and any peculiar excellence in instruction and discipline, as well as the subsequent career of the several Assistants.

5. The date of the introduction of each new branch, such as Algebra, Geometry, Physiology, Chemistry, and any of the natural sciences, with the text books used, and the facilities of practical illustration and manipulation in the latter. Ascertain the history of Art-studies or ornamental branches, and how paid for and taught.

6. The relations of the departments for males and females, as to instruction and boarding, and the opinions of teachers as to the results of their experience in the co-education of the sexes.

7. The arrangement made for boarding non-resident pupils in commons, clubs, and private families, and the advantages, evils, and expense of each mode; and the extent to which non-resident pupils have resorted to the institution from the County, State, or abroad.

8. The denominational character and policy of the religious teaching.

9. The athletic games and exercises, as well as any systematic forms of manual labor for its healthful or economical results, which have at different times prevailed.

10. Any important change in the principles, methods, and penalties in discipline, and particularly in reference to corporal punishment.

11. Influence of Students' Societies for debate, &c., on the power of using the English Language, and habits of reading. Number of volumes in the Library, and resources for annual increase.

12. Rates of tuition, time of payments, abatements.

III. PRESSENT CONDITION under each of the above particulars and general results, such as

1. Whole number of Pupils.

2. Number of College graduates.

3. Number of graduates eminent in political, professional, and industrial life.

4. Influence on other Schools, and education generally.

IV. FUTURE PROSPECTS—if not as favorable as in the past, assign reasons for.

V. APPENDIX.

1. Memoirs of Founders, Benefactors, Instructors, and Alumni.

2. List and, if you can spare, a copy of all printed documents relating to the Institution.

MONSON ACADEMY,

HAMPDEN COUNTY, MASSACHUSETTS.

BY REV. CHARLES HAMMOND, A. M.

MONSON ACADEMY, located in Monson, Hampden County, Mass., was incorporated June 21st, 1804, and with its charter received from the State the endowment of a half township of Maine lands.

The State patronage was given in accordance with the educational policy established by the important resolves concerning Academies passed Feb. 27th, 1797. Westfield Academy had been endowed by the State, and was in successful operation, within the limits of what was then old Hampshire County, but another institution was deemed necessary midway between Westfield and Leicester, and there was a brisk competition between the towns of Brimfield and Monson for the location of the proposed Academy. The same amount of funds to erect the needful buildings was pledged in each town; but the legislature decided the question of location in favor of Monson, where the Academy was opened to the public by formal dedicatory services on the 23d of October, 1806, and the first Principal, Rev. Simeon Colton, D. D., then a recent graduate of Yale College, began his successful work as an instructor.

The governing body of the Academy is a close corporation, similar to most others granted at that period, and resembling, as they all do, the charters granted to colleges in having full powers of administration and oversight. The Founders named in the charter were fifteen in number, and sixty-six Trustees have since been elected as their successors.

PRESIDENTS OF THE CORPORATION.

	<i>Accessus.</i>	<i>Exitus.</i>
Rev. John Willard, D. D.,.....	1805	1807
Rev. Ephraim Ward,.....	1807	1815
Rev. Moses Warren,.....	1815	1818
Rev. Joseph Vaill, D. D.,.....	1818	1820
Rev. Alfred Ely, D. D.,.....	1820	1866
Rev. Joseph Vaill, D. D.,.....	1866	

PRINCIPALS.

<i>Accessus.</i>	<i>Graduates.</i>	<i>Exitus.</i>
1806 Rev. Simeon Colton, D. D.,.....	Yale,	1807
1807 *Rev. Levi Collins, M. A.,.....	"	1813
1813 *Rev. Joy H. Fairchild, M. A.,.....	"	1816

<i>Accessus.</i>		<i>Graduates.</i>	<i>Exits.</i>
1816	Rev. Frederick Gridley, M. A.,	Yale,	1818
1818	*Robert Riddle, M. D.,	"	1820
1820	*Rev. William W. Hunt, M. A.,	Williams,	1821
1821	Rev. Simeon Colton, D. D.,	Yale,	1830
1830	*Rev. William S. Porter, M. A.,	"	1832
1832	Rev. Sanford Lawton, B. A.,	"	1835
1835	Rev. David R. Austin, M. A.,	Union,	1839
1839	Rev. Charles Hammond, M. A.,	Yale,	1841
1841	*Rev. Samuel A. Fay, M. A.,	Amherst,	1842
1842	*Rev. James G. Bridgman, M. A.,	"	1843
1843	Rev. Frederic A. Fiske, M. A.,	"	1844
1845	Rev. Charles Hammond, M. A.,	Yale,	1852
1852	Rev. James Tufts, M. A.,	"	1859
1859	Rev. Wm. J. Harris, M. A.,	"	1861
1861	Rev. Henry M. Grout, M. A.,	Williams,	1862
1863	Rev. Charles Hammond, M. A.,	Yale,	

INSTRUCTORS IN THE ENGLISH DEPARTMENT.

1807	*Oliver Chapin, M. A.,	Williams,	1808
1821	*Jonathan Ely, M. A.,	Union,	1822
1822	*Rev. Ambrose Edson,		1823
1823	Hon. Samuel B. Woolworth, LL. D.,	Hamilton,	1824
1824	Rev. William S. Burt, M. A.,	Union,	1826
1825	*Amos Pettingell, M. A.,	Yale,	1826
1826	*John W. Tenney, M. D.,	Brown,	1827
1827	Rev. Martyn Tupper,	New Jersey,	1828
1828	Arad Gilbert,	Yale,	1828
1828	Rev. John C. Hart,	"	1829
1829	*Hiram Holcomb,	"	1830
1830	Rev. Ezekiel Russell, D. D.,	Amherst,	1830
1830	John Nelson,		1831
1831	*George White, M. D.,	Yale,	1831
1832	Rev. Barnabas M. Fay, M. A.,		1832
1832	*Rev. John Bowers, B. A.,	"	1833
1833	Ebenezer K. Hunt, M. D.,	"	1834
1834	Rev. Elijah F. Rockwell, M. A.,	"	1835
1835	Samuel H. Austin, M. A.,	Union,	1836
1836	Rev. Robert Finley, B. A.,	Union,	1837
1837	Rev. Wm. M. Burchard, B. A.,	Yale,	1838
1838	Lucien Rice,		1839
1839	Rev. Henry C. Morse, M. A.,	"	1839
1839	Rev. Richard S. Storrs, Jr., D. D.,	Amherst,	1840
1840	*Rev. Samuel A. Fay, M. A.,	"	1841
1841	Rev. Charles G. Goddard, M. A.,	"	1842
1842	*Rev. James G. Bridgman, M. A.,	"	1843
1843	Rev. Lewis Green, M. A.,		1843
1843	*Rev. John E. Emerson, M. A.,	"	1843
1843	Edward D. Bangs, M. A.,	"	1844
1844	Flavel C. Selden,		1844
1844	Rev. Daniel H. Temple, M. A.,	"	1844
1841	Rev. William W. Whipple, M. A.,	"	1844
1845	Samuel J. Learned, M. A.,	"	1845
1845	*Rev. Jason Morse, B. A.,	"	1846
1846	*John Munn, B. A.,	Yale,	1848
1848	*Franklin L. F. Plympton,	"	1848
1848	Horace Taylor,	Amherst,	1848
1848	Rev. William C. Dickinson, M. A.,	"	1849
1849	John M. Emerson, M. A.,	"	1850
1850	Rev. Henry M. Tupper, B. A.,	Yale,	1850
1850	John H. Thompson, M. A.,	Amherst,	1851
1851	Rev. Augustus H. Carrier, M. A.,	Yale,	1852

<i>Accessus.</i>	<i>Graduates.</i>	<i>Exitus.</i>
1852 Wm. H. Bigelow, M. A.,	Williams,	1853
1853 Joseph B. Holland, M. A.,	Dartmouth,	1857
1857 Rev. Edwin C. Bissell, M. A.,	Amherst,	1857
1857 Charles W. Seaton, B. A.,	Middlebury,	1858
1858 *William A. Hazeltine, B. A.,	Dartmouth,	1860
1860 Samuel J. Storrs, B. A.,	Amherst,	1861
1863 Rev. Charles B. Sumner, B. A.,	Yale,	1865
1865 Joseph H. Sawyer, B. A.,	Amherst,	1866
1866 Eugene Kingman, B. A.,	Yale,	1867
1867 *John C. Terry, B. A.,	Amherst,	1867
1867 Samuel G. Stone, M. A.,	"	

INSTRUCTORS IN THE FEMALE DEPARTMENT.

<i>Accessus.</i>	<i>Exitus.</i>	<i>Accessus.</i>	<i>Exitus.</i>
1819 Miss Hannah Ely,	1820	1852 Miss Abby L. Bond,	1852
1820 *Miss Caroline P. Dutch,	1821	1852 " Kate B. Arms,	1853
1822 " Mary Trumbull,	1823	1853 " Mary E. Warren,	1854
1830 " Clarissa Chapman,	1831	1853 " Susan G. Ely,†	1853
1831 *Miss Julia M. Brown,	1831	1853 " F. J. L. Wheelock,†	1853
1831 *Miss Ann S. Langdon,	1831	1854 " Mary A. Ranney,	1855
1832 *Miss Sarah Leonard,	1832	1854 " Frances S. Ranney,†	1854
1832 Miss Sarah Bridgman,	1832	1854 " Jennie L. Warren,†	1855
1833 Mrs. Melancia B. Newell,	1834	1854 " Caroline E. Rice,†	1855
1834 Miss Susan C. Whitney,	1835	1855 Mrs. Mary E. W. Tufts,	1856
1835 *Mrs. Lucinda N. Austin,	1839	1855 Miss Martha Crosby,†	1855
1839 Miss Mary A. Sexton,	1840	1856 " Sarah D. Hatch,†	1856
1840 " Susan C. Whitney,	1841	1857 " Emma C. Ward,†	1857
1841 " Harriet Backus,	1841	1857 " Ann C. Rogers,†	1857
1841 " Mary A. Sexton,	1842	1858 Mrs. Mary E. W. Tufts,	1858
1841 " Mary B. Lowell,†	1841	1858 Miss Sarah Beebe,	1860
1842 " Charlotte P. Newman,	1842	1858 " Julia A. Nash,§	1858
1842 " A. Elizabeth Stebbins,	1843	1858 " Mary J. Smith,§	1858
1842 " Ann E. Houghton,†	1843	1858 " Caroline E. Rice,†	1859
1843 " Catharine W. Bridgman,	1843	1859 " Lucy A. Brigham,†	1860
1843 " Maria J. Fiske,	1844	1859 " Josephine R. Dechus-	
1844 * " Mary J. Humphrey,	1844	sea,§	1861
1845 " A. Elizabeth Stebbins,	1845	1859 " Sarah R. Burt,†	1859
1815 " Mary B. Learned,	1846	1861 " Lucy A. Perry,§	1861
1846 " Mary E. Graves,	1846	1861 " Catharine A. Shumway,	1861
1846 * " Esther M. Gould,	1847	1863 " Kate B. Wilcox,	1864
1847 " Delia C. Torrey,	1847	1864 " Louisa J. Clapp,	1865
1847 " Louisa M. Torrey,	1847	1864 Mrs. Carrie E. Converse,†	
1847 " Rebekah R. Browne,	1848	1865 Miss Kate B. Wilcox,	1867
1848 " Martha M. Dickinson,	1849	1866 " Miss Julia E. Smith.	
1849 " Catharine Hitchcock,	1849	1866 Mrs. Jennie L. Glynne,†	
1849 " Cynthia Fowler,	1852	1867 Miss Julia A. Eastman.	

The following is a complete list of the Trustees, with the date of their appointment and exit of office:—

TRUSTEES.

<i>Accessus.</i>	<i>Exitus.</i>	<i>Accessus.</i>	<i>Exitus.</i>
Rev. John Willard, D. D.,	1804 1807	Rev. Richard S. Storrs,	1804 1815
Joel Norcross, Esq.,	1804 1846	Abel Goodell, Esq.,	1804 1810
Rufus Flynt, Esq.,	1804 1836	Gad Colton, Esq.,	1804 1823
Rev. Ephraim Ward,	1804 1816	Rev. Moses Warren,	1804 1821
Rev. Jesse Ives,	1804 1805	Rev. Ezra Witter,	1804 1814
Darius Munger, Esq.,	1804 1816	Rev. Moses Baldwin,	1804 1811
Dr. Ede Whitaker,	1804 1809	Aaron Merrick, Esq.,	1804 1811

† Teacher of Music.

‡ Teacher of Drawing.

§ Teacher of French.

	<i>Accessus. Exitus.</i>		<i>Accessus. Exitus.</i>
Azel Utley, Esq.,	1804 1809	Dea. Andrew W. Porter,	1834 1852
Stephen Pyncheon, Esq.,	1806 1822	Rev. Joseph Fuller,	1835 1837
Rev. Alfred Ely, D. D.,	1807 1866	Rev. Rodney G. Dennis,	1835 1843
Abner Brown, Esq.,	1809 1819	Rev. Eber Carpenter,	1837 1845
Rev. Sylvester Burt,	1809 1812	Rev. George Trask,	1837 1844
Dr. Ede Whitaker,	1810 1824	Charles Stearns, Esq.,	1837 1857
Rev. Simeon Colton, D. D.,	1811 1822	Miner Grant, Esq.,	1838 1850
Samuel Willard, Esq.,	1811 1816	Rev. Joseph Vaill, D. D.,	1838 1844
Benjamin Fuller, Esq.,	1813 1818	Joseph L. Reynolds, Esq.,	1841
Rev. Joseph Vaill, D. D.,	1814 1835	Rev. David R. Austin,	1843 1852
Rev. Munson C. Gaylord,	1816 1830	Rev. Sam'l C. Bartlett, D. D.,	1843 1846
Dea. Abraham Haskell,	1816 1823	Rev. Moses K. Cross,	1843 1850
Benning Mann, Esq.,	1816 1831	Horatio Lyon, Esq.,	1844
Rev. Joy H. Fairchild,	1816 1821	Rev. John Bowers,	1844 1857
Col. Israel E. Trask,	1819 1831	Rev. Abram Marsh,	1845
Col. Amos Hamilton,	1819 1825	Rev. Geo. A. Calhoun, D. D.,	1846 1845
Rev. Eliakim Phelps, D. D.,	1821 1827	Samuel S. Spaulding, Esq.,	1847 1845
Rev. Alvan Bond, D. D.,	1821 1832	Rev. Charles B. Kittredge,	1847
Rev. Ansel Nash,	1822 1832	Rev. Jason Morse,	1850 1861
John Wyles, Esq.,	1823 1841	William N. Flynt, Esq.,	1852
Rev. Hubbel Loomis,	1823 1829	Rev. Joseph Vaill, D. D.,	1852
Rev. Baxter Dickinson, D.D.,	1823 1830	Albert Norcross, Esq.,	1852 1864
Hon. John Hall,	1824 1831	Rev. John W. Harding,	1855
Timothy Packard, Esq.,	1825 1861	Samuel M. Lane, Esq.,	1855 1859
Rev. Lyman Coleman, D. D.,	1827 1832	Rev. Theron G. Colton,	1857 1867
Rev. Thos. E. Vermilye, D.D.,	1830 1835	Charles Merriam, Esq.,	1857 1860
Gen. Alanson Knox,	1831 1838	William Mixter, Esq.,	1859 1867
Rev. Martyn Tupper,	1831 1846	Alvan Smith, M. D.,	1860
Rev. Jonat'n B. Condit, D.D.,	1831 1838	Charles H. Merriek, Esq.,	1862
Rev. John Wilder,	1831 1833	Cyrus W. Holmes, Jr., Esq.,	1862
Rev. Joseph S. Clark, D.D.,	1832 1843	Alfred Norcross, Esq.,	1864
Hon. R. A. Chapman, LL.D.,	1832	Rev. Ariel E. P. Perkins,	1867
Jonathan Ely, Esq.,	1832 1837	Rev. Charles Hammond,	1867
Rev. Samuel Backus,	1832 1843		

In a general review of the Trusteeship, it appears that many of its members have been distinguished in professional life, and were also connected as trustees and teachers in colleges and higher seminaries. Their influence has always been felt in favor of thorough training and discipline, and hence the Academy through its entire history has fitted candidates for college as one of its important objects.

Dr. Willard, the first President of the corporation, was distinguished for classical attainments in his time, as was his brother, Dr. Joseph Willard, President of Harvard College, and it was his most cherished hope that the Academy might become a seat of sound learning, and as such extend its benefits to distant generations. Rev. Dr. Ely, who succeeded him in the Trusteeship and was for nearly half a century the President of the Board of Trust, was an officer in Princeton College, and a Trustee of Amherst for twenty-nine years. Rev. Dr. Vaill, his successor, was first appointed a Trustee of Monson Academy in 1814, and has been a Trustee of Amherst College ever since it was incorporated.

BENEFACTORS AND ENDOWMENTS.

Monson Academy has not been favored with the liberal benefactions of a few individuals, as the Phillips Academies at Andover and Exeter and Williston have been. Its endowments until recently have been very limited, and now they are far from being sufficient for the wants of the institution. From the first, however, the institution has not lacked the sympathy of devoted trustees and teachers, and several times the citizens of Monson have made generous contributions to meet pressing necessities.

The original building, which still remains though greatly enlarged, was erected by the aid of a general subscription. The Charity Fund was given in the same way. So also the Academy was repaired in 1845 at an expense of \$3,600, and in 1863, \$10,000 was added to the General Fund by the subscription of the people of Monson. At the same time the non-resident alumni and a few of the citizens raised nearly \$6,000 for repairs and the purchase of apparatus. The largest benefactor of the Academy was Joel Norcross, Esq., who in various ways gave \$7,250. Deacon Andrew W. Porter has given \$3,200, and Rufus Flynt, Esq., gave \$2,250, and the legacy of Rev. J. L. Merrick was \$2,000. The following is a schedule of benefactions, so far as ascertained :—

1804	State donation of half township of Maine lands,	\$10,000
1805	Donations of individuals to erect the Academy building,	3,200
1805	Gift of an acre of land for the Academy building,	100
1805	Donation of bell by Benjamin Fuller, Esq., of Monson,	100
1805	Donation of pair of globes by Ephraim Hyde, of Monson,	50
1805	Donation of surveyor's compass and chain by Isaac Fuller,	25
1810	Legacy of Abel Goodell, Esq., one of the Trustees,	200
1817	Donation to aid in building boarding-house by Joel Norcross, Esq.,	2,000
1817	Donation for building boarding-house by Rufus Flynt,	1,000
1822	Donation of six pews in the church, half acre of land, and \$250 in cash, the whole valued at \$750, by Joel Norcross,	750
1825	The Charity Fund given by subscription,	6,500
1826	Donation of Joel Norcross to the General Fund,	3,000
1826	Donation to the Library Fund by Rufus Flynt, Esq., and Timothy Packard, Esq., each \$250,	500
1810	Donation of Dea. A. W. Porter for repairs,	100
1845	Subscription for repairs and apparatus,	3,600
1847	Donation of a clock for the Hall by Orson D. Munn, Esq.,	40
1850	Donation by Mr. Alfred Norcross of two pieces of land adjoining the Academy grounds, to enlarge them and furnish the oppor- tunity to build the bank walls,	50
1850	Subscription of citizens for grading and inclosing grounds with granite walls,	300
1861	Legacy of Samuel T. Lane to the Charity Fund,	50
1863	Subscription to the General Fund by citizens of Monson,	10,000
1863	Subscription of the alumni for repairs,	4,000
1863	Subscription of citizens of Monson to build the south wing of the Academy,	850
1864	Donation of individuals for apparatus,	1,200
1866	Legacy of Rev. J. L. Merrick of the Persian scholarship,	2,000
1866	Donation of Horatio Lyon, Esq.,	500
Whole amount of benefactions,		\$50,115

Present value of the buildings, furniture and grounds is estimated at \$15,000
 Amount of vested funds is \$25,000
 Apparatus owned by the Academy previous to 1865 cost not less than... \$1,500
 There was raised for the chemical and philosophical apparatus in 1865, \$1,200

DEPARTMENTS OF INSTRUCTION.

At first the Principal was the sole teacher. The second year an assistant was employed. This arrangement continued only one year, and the Principal afterwards was the sole teacher until 1819, when Miss Hannah Ely, the first female teacher, was appointed.

The School was managed till 1822 under two teachers, the Principal and a female assistant, when a male instructor was employed and ever after continued at the head of the English School. A distinct Female Department has been continued without interruption since 1839. From 1830 to 1839, a female teacher was employed one or two terms in the year, when the attendance required extra instruction.

The Department of Ornamental Branches has been taught by special teachers. Music and drawing by a teacher devoted wholly to those branches. Penmanship has been a specialty, and taught by courses of lessons at a stipulated price, as the teacher might agree with his pupils.

THE CLASSICAL DEPARTMENT

Has been under the instruction of the Principal, who has also had the discipline of the other departments chiefly in his hands. The course of instruction has been arranged to meet the conditions of admission to Yale and Amherst colleges, being changed according as the standard of requirements to those institutions has advanced. The amount of reading in the classics now required, is nearly one half less in extent, while the time required for preparation in the same studies is one-third more than it was twenty-five years ago. Then the whole of Virgil, all of Folsom's Cicero, the Latin Reader, and Sallust or Nepos, were required in Latin and in Greek; the four Gospels, Jacob's Reader in full, and one book in Homer. Now the Latin Lessons of Andrews, the Latin Reader, two books of Cæsar, seven orations of Cicero, the Bucolics, three Georgics, six books of the Æneid, Harkness' Greek Lessons, three books of the Anabasis, and three books in Homer are read. Formerly candidates for college studied arithmetic, English grammar and geography, to an extent sufficient to teach a common district school. Now in addition they must read two books in Playfair's Euclid, or an equivalent in some other geometry, and go as far as quadratics in algebra. Arnold's prose composition is studied as far as the 11th section.

THE ENGLISH DEPARTMENT

At first and until about 1820 consisted chiefly of those who studied but little more than the common English branches. When graduates of colleges were introduced as teachers, Day's Algebra was taught to the more advanced classes. Since 1840 nearly two-thirds of all the English pupils have studied algebra, and as many as one-fourth geometry. Surveying has been taught since the Academy was opened, at first in treatises like Flynt's, which did not require geometry as a preliminary study, save a few definitions—latterly in treatises like Davies' and Loomis', which are supplemental to elementary geometry. Natural philosophy has been taught since 1825 in regular classes. Since 1845 the school has had the advantage of a good apparatus to illustrate the principles of the ordinary text-books. Lectures on chemistry were given by Dr. Colton in a laboratory erected for his special use. At the present time, lectures on natural philosophy are given two terms in the year, and on chemistry in the Winter. Botany is taught in the Summer term. Physiology and astronomy are taught to classes formed occasionally.

English grammar is taught to nearly all the members of the academy, in some of its divisions or departments. Spelling is a daily exercise for all the students, in the use of a spelling-book designed for advanced classes. Quackenboss' lessons in rhetorical composition are studied by the advanced grammar classes. Declamations and compositions are required once in two weeks. A class for daily reading is formed nearly every term.

STUDIES OF THE FALL TERM, 1867.

In the CLASSICAL DEPARTMENT were six classes taught by the Principal, viz. :
1st, in *Virgil*, consisting of 7 pupils, who read and reviewed, in 13 weeks, the 3d, 4th, 5th and 6th books of the *Æneid*.

2d, *Chemistry*, a class of 15 recited one-half of Youman's treatise in 13 weeks, and reviewed.

3d, Cicero, a class of 9 pupils, who read and reviewed 4 orations in 13 weeks.

4th, *Anabasis*, 7 in the class—read and reviewed 3d book and also 300 lines in 1st book of *Iliad* in 13 weeks.

5th, Harkness' First Lessons, 6 in the class—reviewed the first half of the book and half of the selections in advance in 13 weeks.

6th, *Roman History* in the Latin Reader, 7 in the class—read all the history and most of the geography in 13 weeks.

In the ENGLISH DEPARTMENT were six classes taught by the male assistant:—

1. Virgil, 8 in the class—read 1 book of the *Æneid* in 13 weeks.

2. Natural Philosophy, 22 in the class—recited 140 pages of Wells from the beginning.

3. *Arithmetic*, interest and percentage rules, 15 in the class—advanced 50 pages in Eaton's Higher Arithmetic.

4. *Algebra*, intermediate class of 10 pupils—recited from simple equations in Greenleaf's treatise to quadratics.

5. Arithmetic advance, beginning at partnership and completing the book—a class of 5 pupils.

In the FEMALE DEPARTMENT, under the instruction of the Preceptress, seven classes:—

1. *Latin Beginners*, a class of 10 pupils advanced half through Andrews' Lessons in 13 weeks.

2. French, one class of 4 beginners, and one class of 4 pupils in Corinne.

3. *Arithmetic beginning at fractions* (in Eaton's Common School,) a class of 16 finished vulgar and decimal fractions in 13 weeks, and reviewed 50 pages.

4. *Advance English Grammar*, with Greene as a text-book, and Quackenboss' Lessons in English Composition—a class of 19.

In Quackenboss the class recited from page 23d on punctuation, 50 pages in 6½ weeks. They had a parsing lesson each day, and reviewed the etymology in Greene's larger Grammar. The recitation was one hour.

5. *Beginners in English Grammar*, a class of 11 using Greene's Introduction. They reviewed the etymology and syntax, and had each day a parsing exercise.

6. *Physical Geography* (Fitch's,) a class of six. They went through the book in the term of 13 weeks.

7. *Algebra beginners*, a class of 13 in Greenleaf went 112 pages from the beginning to equations of two or more unknown quantities.

Under the instruction of the ASSISTANT IN THE FEMALE DEPARTMENT, six classes recite:—

1. Geometry (Greenleaf's,) 12 in the class—1 section, 3 books beginners in 12 weeks—2 sections, 3 books advance in 11 weeks.

2. Algebra (Greenleaf's,) 4 in the class, advanced from quadratic equations, page 119, to logarithms, on page 313, in 13 weeks.

3. *Arithmetic, Fractions*, 4 in the class, consisting of 3 Japanese and 1 Spaniard.

4. *United States History*, 2 Japanese, who read the lessons to learn the pronunciation of words and their definitions, and recited the lessons in addition.

5. READING AND SPELLING, 3 Japanese in the class.

6. NATURAL PHILOSOPHY, 2 Japanese in the class. They advanced 120 pages in 13 weeks.

Recitations to an assistant pupil by a class consisting of four Japanese pupils in arithmetic, who recited one hour and a half.

There were two divisions in declamation and composition, in which all the male students took part. The ladies wrote compositions and repeated selections from English literature.

Rehearsals in elocution were given privately by one of the teachers to such as spoke in the chapel on Wednesday afternoons.

PATRONAGE.

Monson Academy from the first has been a mixed school. The proportion of gentlemen to ladies has been nearly two to one. For the last four years, the average yearly attendance of different pupils has been 175, of which number the average number of males has been 112, of females 63.

Two-thirds of the patronage is non-resident, most of which belongs to the classical department. The average yearly attendance of different pupils belonging to the English school for the last four years has been 100, of which just half have been non-residents of Monson.

The whole number of students connected with the academy can not now be ascertained, but it has been estimated at not less than

six thousand in 68 years. Of this number, five hundred at least entered college, and many studied law and medicine with no other literary preparation than what they received in the academy. Of the alumni of the academy who are college graduates, many have become distinguished in the professions of medicine and law. Two hundred have become ministers of the Gospel;—many have been engaged in the work of education;—two have been presidents of colleges;—three, professors, one each at Harvard, Yale, and at the University of Michigan;—eleven have been tutors at Yale, four at Amherst; three have been members of Congress; one a Judge of the Supreme Court of Massachusetts, one, the Secretary of the Board of Education in Connecticut, Organizer and Commissioner of Public Schools in Rhode Island, and United States Commissioner of Education at Washington.

BOARDING ARRANGEMENTS.

A boarding-house was built in 1818, but not answering the purpose of its erection it was sold in 1882. Since then no common dormitories or boarding establishments have been furnished. This fact accounts for the comparatively limited patronage of the school. The students find homes in private families, and the prices have varied according to the accommodations received and the state of the markets—ranging from \$1.00 a week in 1806 to \$5.00 or \$6.00 in 1867.

RELIGIOUS EDUCATION.

The object of the Institution has always been to maintain a healthy moral influence by the sanctions of religion freely and earnestly impressed on the students. The Academy has always been under the control of Trustees who were Congregationalists, and of the same faith were nearly all its benefactors and teachers. And yet no offensive discrimination has ever been made in regard to the advantages of the Institution, nor is it known that any student of another denomination has complained of any lack of interest, or of interference with his faith, on the part of trustees or teachers.

Regular attendance on public worship is required on the Sabbath, where the pupils may desire or their parents direct.

The charity funds of the academy were all given for the advantage of young men preparing for the Gospel ministry, without any denominational restrictions by the donors.

GOVERNMENT OR DISCIPLINE.

The discipline as well as the instruction of the School is placed

under the care of the Principal, who nominates his assistants, subject to the approval of the trustees. The government of the School is in charge of the Principal, the assistants being responsible only for the order of their own rooms and the duty of reporting instances of disorder to the Principal. The penalties are admonition, suspension, and expulsion. Corporal punishment was in former times made use of occasionally, but for many years has been very rarely inflicted. The pupils have mostly passed the period of boyhood, and expulsion is resorted to as the severest punishment necessary in such a school.

THE LINOPHILIAN SOCIETY

Was established in 1819, and is one of the oldest debating societies in New England. It has a hall fitted up in good style, with every convenience for the ordinary meetings of its members, which are held every week on Wednesday evenings. Once a term, a public meeting is held in the chapel. The society has an excellent library of 600 volumes kept in a room furnished for that purpose. The students have always been greatly interested in this society and its library.

THE FLYNT AND PACKARD LIBRARY

Consists of nearly 700 volumes of choice books, chiefly books of reference in every branch of instruction taught in the academy. This library is the result of a donation of \$500, the income of which is annually expended. A tax of 25 cents a term is required of those who choose to avail themselves of its advantages, which is expended in rebinding and replacing books injured or lost. It is one of the best school libraries in the country.

TUITION.

From 1806 to 1822, tuition was at the rate of \$10,00 per annum, or \$2,50 per quarter, all studies being charged alike. A contingent charge was made of 17 cents a term, and 50 cents for wood in the Winter. From 1822 to 1831, the tuition was at the rate of \$12 per annum for English studies and \$4 for classical, with a contingent charge of 17 cents per term, and a charge for wood of from 17 cents to 34 cents a term. From 1832 to 1854, the tuition was from \$14 to \$18 per annum, with no charge for contingencies. From 1854 to 1867, the tuition was from \$17 to \$21 per annum, with a contingent charge of 50 cents per term.

The school year until 1848 was divided into quarters of 11 weeks each. From 1848 to 1862, the school year of 42 weeks—the Fall

term of 12 weeks and the Summer and Winter 15 each. The year now consists of 40 weeks—the Summer and Fall terms each 13 weeks and the Winter 14 weeks.

Tuition in music has been paid for special courses without regard to term divisions of time. The same is true of drawing and other ornamental branches. French has been rated generally as a classical study, but sometimes paid for as an extra or ornamental branch.

THE PRESENT CONDITION AND PROSPECTS OF THE ACADEMY.

At no past period of its history has the condition of the academy been so promising as it is now. With limited funds and limited accommodations, it has never attained a large place in the public eye as a school great in numbers, when compared with others more highly favored in endowments and public dormitories. And yet owing to a wise and prudent trusteeship, the School has been sustained with a uniform patronage, and its alumni have done credit to the place of their youthful studies.

MASSACHUSETTS POLICY OF INCORPORATED ACADEMIES.

THE earliest schools in Massachusetts, technically known as Free, Grammar, or Town schools, imparted secondary as well as elementary instruction; but the needs of families not residing within towns on which such schools were made obligatory by law, led to the establishment of a class of institutions known as Academies, the public policy of which is set forth in the following document:—

At the General Court of the Commonwealth of Massachusetts, held on the 25th day of January, 1797,

ORDERED, That the secretary be, and he hereby is, directed to cause the report of a committee of both houses on the subject of grants of land to sundry academies within this Commonwealth, to be printed with the resolves which shall pass the general court at the present session.

And be it further ordered, That the grants of land specified in said report shall be made to the trustees of any association within the respective counties mentioned in said report, where there is no academy at present instituted, who shall first make application to the general court for that purpose: *provided*, they produce evidence that the sum required in said report is secured to the use of such institution: and *provided*, that the place contemplated for the situation of the academy be approved of by the legislature.

Report on the subject of Academies at Large. Feb. 27, 1797.

The committee of both Houses, to whom was referred the subject of academies at large, and also sundry petitions for grants of public lands to particular academies, having accordingly considered the subject on general principles, and likewise the several petitions referred to them, submit the following report:

On a general view of this subject, the committee are of opinion that the system hitherto pursued, of endowing academies with State lands ought to be continued—but with several material alterations; first, that no academy, (at least not already erected,) ought to be encouraged by government, unless it have a neighborhood to support it of at least thirty or forty thousand inhabitants, not accommodated in any manner by any other academies, by any college or school answering the purpose of an academy; secondly, that every such portion of the Commonwealth ought to be considered as equally entitled to grants of State lands to these institutions, in aid of private donations; and thirdly, that no State lands ought to be granted to any academy, but in aid of permanent funds; secured by towns and individual donors: and therefore, previous to any such grant of State lands, evidence ought to be produced that such funds are legally secured, at least adequate to erect and repair the necessary buildings, to support the corporation, to procure and preserve such apparatus and books as may be necessary, and to pay a part of the salaries of the preceptors.

In attending to the particular cases, the committee find that fifteen academies have already been incorporated in this Commonwealth; also Derby School, which serves all the general purposes of an academy, but that the academy at Marblehead probably will only serve the purposes of a town school. And the committee are of opinion that the three colleges established and endowed by the State and private donors, will serve many of the purposes of academies in their respective neighborhood, so that if four or five academies more shall be allowed in those parts of the Commonwealth where they may be most wanted, there will be one academy to every 25,000 inhabitants, and probably, therefore, they must struggle with many difficulties until the wealth and population of the State shall be very considerably increased; for however useful colleges and academies may be for many purposes, yet it is very obvious that the great body of the people will and must educate their children in town district schools, where they can be boarded or supported by their parents.

The committee find that of the fifteen academies already incorporated, seven

of them have had grants of State lands, that at Fryeburgh of 15,000 acres, and the other six, at Machias, Hallowell, Berwick, Marblehead, Taunton, and Leicester, one township each. To extend this plan of a township to each academy to those academies already allowed, and to those which from local circumstances may be justly claimed, would require the grants of twelve or thirteen townships more. The committee think this number too large, and therefore propose half a township of six miles square, of the unappropriated lands in the district of Maine, to be granted to each academy having secured to it the private funds of towns and individual donors before described, to be laid out or assigned (with the usual reservations) by the committee for the sale of eastern lands.

Of the eight academies already incorporated and not endowed by the Commonwealth, part appear to have been endowed by towns and individuals; and as to part, no satisfactory evidence is produced of such endowments.

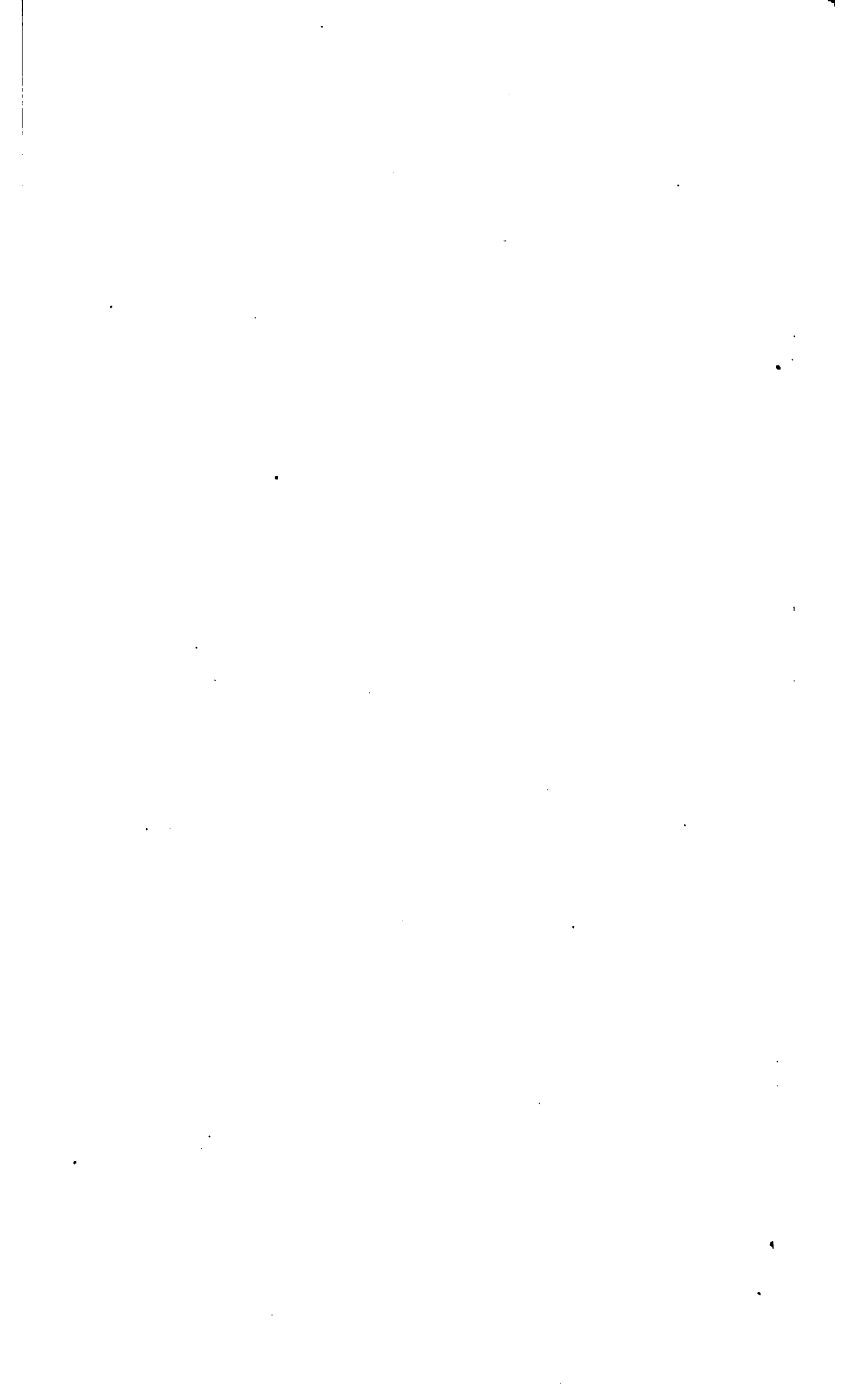
It appears that Dummer's Academy, in Newbury, has legally secured to it a permanent fund for its support, by a private donor, to the amount of \$6,000; and that Phillips Academy, in Andover, has a fund something larger, secured in like manner; that each of these academies was established in a proper situation.

It appears that the academies in Groton and Westford are about seven miles apart, both in the county of Middlesex, and with a neighborhood perhaps not so adequate as could be wished to the support of two; that each of them has received the donations of towns and individuals to the amount of about \$2,500, and that each of them is now much embarrassed for want of funds, but both of these academies have been incorporated and countenanced by the legislature, and must be considered as fully adequate for the county of Middlesex.

On the whole the committee propose an immediate grant of half a township of the description aforesaid, to each of these four academies. As to the academies at Portland, Westfield and New Salem, and in the county of Plymouth, the committee propose that half a township, of the description aforesaid, be granted to each of them: *provided*, each of them shall, within three years, produce evidence that there is a permanent fund legally secured to each by town or individual donors, to the amount of \$3,000, and that the Act establishing an Academy in the town of Plymouth be repealed, and an Act be passed establishing an Academy in the county of Plymouth, on the principles of the petition from that county; and that half a township of land be granted to each of the counties of Barnstable, Nantucket, Norfolk, and Dukes County, and Hancock, for the purpose of an Academy; *provided* they shall, within three years, severally furnish evidence that funds are secured by towns or individual donors to the amount of \$3,000, for the support of each of the said academies.

The Joint Standing Committee on Education (Hon. Charles W. Upham, *Chairman*.) in a Report dated March 30, 1859—after reciting the above report, as proceeding from a Committee “composed of leading and experienced men, of whom Nathan Dane of Beverly was one,”—“and as published by the General Court, containing most decisive and emphatic annunciation of the policy of the State”—remark:

The following principles appear to have been established, as determining the relations of academies to the Commonwealth. They were to be regarded as in many respects and to a considerable extent, public schools; as a part of an organized system of public and universal education; as opening the way, for all the people, to a higher order of instruction than the common schools can supply, and as a complement to them, towns, as well as the Commonwealth, were to share, with individuals, the character of founders, or legal visitors of them. They were to be distributed, as nearly as might be, so as to accommodate the different districts or localities of the State, according to a measure of population, that is, 25,000 individuals. In this way they were to be placed within the reach of the whole people, and their advantages secured, as equally and effectively as possible, for the common benefit.



VII. EDUCATIONAL BIOGRAPHY.

EGERTON RYERSON, D. D., LL. D.

CHIEF SUPERINTENDENT OF EDUCATION FOR UPPER CANADA SINCE 1844.

THE REVEREND EGERTON RYERSON, (or, as he was baptized, Adolphus Egerton Ryerson,) was born in the township of Charlotteville, near Lake Erie, London (afterward the Talbot) District, (now the County of Norfolk) on the 24th of March, 1803.

His father, Colonel Joseph Ryerson, a United Empire Loyalist in the British service at the time of the American Revolution, was born in New Jersey. He first joined as a cadet, and was one of the five hundred and fifty loyal volunteers who went to Charleston, South Carolina. For his good conduct in bearing dispatches one hundred and ninety-six miles into the interior, he was promoted to a lieutenancy in the Prince of Wales' Volunteers by Sir Guy Carleton, (Lord Dorchester.) Subsequently he was engaged in six battles, and was once wounded. At the peace of 1783 he was exiled, and went to New Brunswick, thence to Canada—he and his family enduring very great hardship in penetrating into the interior of the then unbroken wilderness of Canada. He settled in Charlotteville, and lived there about seventy years. In the war of 1812 he and his three sons again joined the British standard, and acquitted themselves bravely. During his life he held various appointments under the crown. He died in 1854, at the venerable age of ninety-four years, after having enjoyed his half-pay as a British officer for the unprecedented period of seventy years!

Doctor Ryerson was the fourth son of Colonel Ryerson, and was named after two British officers who were intimate friends of his father. His youth was passed in his native county; and at its Grammar School he received the rudiments of his early education. With Mr. Law, the Master of the Gore District Grammar School at Hamilton, (at the head of Lake Ontario) he studied the classics. As the Grammar Schools were the only public schools at that time in existence in the country, (and they had only just then been established) they were in the rural counties very elementary in their character, and did not profess to teach more than the mere rudiments of an

English education. The young and ardent student, as Doctor Ryerson then was, (and has so continued during his life-time) not content with the superficial knowledge of grammar which he obtained at school, prevailed upon his father to allow him to go from home for six months to attend a grammar class which had been established in the county town on that specific subject.

Doctor Ryerson's habits of study at this time were characteristic of his practice in after life. When at school he had entirely mastered the theory and principles of English grammar, and had learned all the rules and explanations, and in fact nearly the whole book by rote, yet having had no one to explain the theory or to apply the principles of the text-book, it was not until he attended the grammar class that he was able fully to comprehend the beauty, flexibility and power of the language. He also at this time prepared and wrote out a digest of Murray's English Grammar, in two volumes, Kame's Elements of Criticism, and Blair's Rhetoric and a Latin Grammar. He was an indefatigable student; and so thoroughly did he ground himself in these and kindred subjects thus early in life and under most adverse circumstances, that in his subsequently active career as a writer and controversialist he ever evinced a power and readiness with his tongue and pen which has often astonished those who were unacquainted with the laborious thoroughness of his previous preparation.

Doctor Ryerson's experience as a teacher did not extend beyond the grammar school of his native county. At the age of sixteen he was appointed usher, or assistant teacher, to his eldest brother, George, (who had received his training at Union College, Schenectady) and who succeeded his brother-in-law, Mr. Mitchell, on his appointment by the Governor to the judgeship of the county. During the absence of his brother George, the charge of the school devolved upon the youthful usher. Having thus the management of boys and girls who were his companions, and many of them several years his senior, his firmness, tact and decision were frequently put to the test, but he acquitted himself well, and the experience thus gained was afterwards turned to higher account.

Doctor Ryerson's mother was a woman distinguished for her clearness of intellect, for her strong religious principles, and for her kindness of disposition. Egerton was her favorite son; and she sought to inculcate in his ardent mind those higher Christian principles and motives which lie at the basis of all true excellence of character. Nor was her motherly tenderness with its persuasive teaching and example lost upon her distinguished son.

Three of his brothers, George, John and William, having entered the ministry of the Methodist Episcopal Church, Egerton, with a glowing heart and ardent zeal, after due preparation, also followed their example. On his twenty-second birth-day (24th March, 1825) he was ordained deacon by the venerable Bishop Hedding. It being Easter, his first sermon was on the appropriate subject of the resurrection of our Redeemer.

He was first stationed on the Niagara circuit, extending for many miles, then on the Yonge Street circuit, including the town of York, (now Toronto) and in succession at the River Credit (Indian Mission) Toronto, Cobourg, Ancaster, etc. Circuits in those days rarely embraced a section of country much less than from forty or fifty miles in extent, with the scattered settlers few and far between. Doctor Ryerson's diary at this time shows how devotedly he applied himself to the culture of his mind, although his valise often contained the chief part of his library, and the back of his horse frequently afforded him the only place for study.

Doctor Ryerson put forth his first literary effort in 1827; and by it at once established his reputation as a skillful and able controversial writer. The occasion arose out of some unjust remarks upon various religious bodies, which were contained in a published sermon which had been preached by the Reverend Doctor Strachan (the late venerable Bishop of Toronto) on the death of Bishop Mountain of Quebec. Doctor Ryerson replied through the press in a series of trenchant letters, which were afterwards collected and reprinted in a pamphlet, under the title of "Claims of Churchmen and Dissenters in Upper Canada brought to the Test." In the same year, while stationed at Cobourg, he also replied (in a series of letters addressed to Doctor Strachan) to the aspersions cast upon the Methodists and other religious bodies, in a speech delivered by the same gentleman in the Legislative Council of Upper Canada in March of that year. These letters were also republished in pamphlet form.

In 1829, (the year after the American General Conference had constituted the Canada branch a separate annual conference) Doctor Ryerson took a prominent part in the establishment of the *Christian Guardian* newspaper, as the organ of the Conference, and as a channel of reply to such attacks as were made by Dr. Strachan upon that body in 1828. He was its first editor, and continued so for several years. In 1833 he was deputed by the Conference to go to England and take part in the negotiations which were set on foot for the formation of a union between the English and Canadian Conferences.

This union took place in 1833-4, and the Episcopal form of church government among the Methodists in Canada was changed to that of the Wesleyans in England.

In 1835 Doctor Ryerson was again deputed to proceed to England to obtain a royal charter, and to collect subscriptions for an excellent Academy which the Conference had lately established at Cobourg. In these objects he was, after much labor, highly successful. He also prevailed upon the home government to obtain from the Canadian Legislature, (even against Sir F. B. Head's wishes) aid to the extent of upwards of \$16,000 for the Academy. In the two years, during which Doctor Ryerson remained in England on this mission, he had abundant opportunities, of which he freely availed himself, of becoming acquainted with the public men and institutions of the mother country. He also, at the same time, rendered essential service to his native land in exposing (through the columns of the *London Times*, under the signature of "*A Canadian*,") the unpatriotic and revolutionary character of Messrs. Hume and Roebuck's agitation on Canadian politics in England. He also wrote letters to Canada (for publication in the *Christian Guardian*) containing his "impressions" on various social, political and clerical questions in England, which attracted much attention, and created a good deal of discussion.

On his return to Canada early in 1837, on the eve of the eventful crisis of the rebellion, he was again appointed editor of the *Guardian*; and in that position he rendered essential service to the cause of social order and political and religious liberty in the province. In 1839 Doctor Ryerson addressed a series of ten letters to the present Chief Justice of Upper Canada on the celebrated "Clergy (Land) Reserve Question, as a matter of History, a question of Law, and a subject of Legislation." These letters were distinguished by much learning, research and legal acumen, and were extensively read and often quoted in subsequent discussions on the subject in Upper Canada.

In 1840 he was again deputed with his brother William to go to England to represent the Canadian Conference in its efforts to restore the union which the English Wesleyan Conference had for various reasons broken off.

In 1840 an act of incorporation was obtained from the then recently united Canadian Legislature, erecting Upper Canada Academy into a University under the name and style of the "University of Victoria College at Cobourg." Doctor Ryerson (who then received the title of D. D. from the Wesleyan University, Middletown, Connecticut,) was unanimously chosen its first president, and for four years labored assiduously to promote its best interests.

In the address of the Reverend Doctor Green, President of the Conference, at the ceremony of the Inauguration of the Principal of the College, Doctor Ryerson's qualifications for this important post are thus referred to—and he was mentioned as “a gentleman of a sound, discriminating mind, of general knowledge, capable of taking a statesmanlike view of great and important questions, favorably known in the province, having some experience in the art of teaching, and of indomitable, untiring perseverance in accomplishing his objects of pursuit.” Doctor Ryerson's own address on his inauguration as principal, was a comprehensive, eloquent and practical exposition of the “nature and advantage of an English and Liberal Education.” Incidentally if not prophetically, he had in his own inaugural address referred to the system of public instruction just then introduced into the country, and which was afterwards destined in his own hands to become all that he had predicted for it. “A foundation,” said he, “for a common school system in this province has been laid by the Legislature, *which I believe will at no distant day, exceed in efficiency any yet established on the American continent.*”

The highly practical and statesmanlike views which Doctor Ryerson held on this important question, pointed him out among the public men of Canada as eminently qualified to control and direct this great national work. In 1844, therefore, after three years' experience of the working of the new system of public education, Doctor Ryerson was appointed its superintendent by His Excellency the Governor General, with an understanding that he would re-lay the entire foundation of the system, and establish it on a wider and more enduring basis. The instructions which he received on his formal appointment were contained in the following words:

“His Excellency has no doubt that you will give your best exertions to your new office, and that you will lose no time in devoting yourself to devising such measures as may be necessary to provide proper school books; to establish the most efficient system of instruction; to elevate the character of both teachers and schools; and to encourage every plan and effort to educate and improve the youthful mind of the country; and His Excellency feels assured that your endeavors in matters so important to Western Canada, will be alike satisfactory to the public, and creditable to yourself.”

After detailing the steps which he had taken to carry these instructions into effect, Doctor Ryerson in his report to Lord Cathcart, the Governor General, March, 1846, thus defines his views upon this all important subject. (We quote a few passages only.)

"By Education, I mean not the mere acquisition of certain arts, or of certain branches of knowledge, but that instruction and discipline which qualify and dispose the subjects of it for their appropriate duties and employments of life, as Christians, as persons in business, and also as members of the civil community in which they live.

"The basis of an educational structure adapted to this end should be as broad as the population of the country; and its loftiest elevation should equal the highest demands of the learned professions, adapting its gradation of schools to the wants of the several classes of the community, and to their respective employments or professions, the one rising above the other—the one conducting to the other; yet each complete in itself for the degree of education it imparts; a character of uniformity as to fundamental principles pervading the whole: the whole based upon the principles of Christianity, and uniting the combined influence and support of the government and the people.

"The branches of knowledge which it is essential that all should understand, should be provided *for all*, and taught to all; should be brought within the reach of the most needy, and forced upon the attention of the most careless. The knowledge required for the scientific pursuit of mechanics, agriculture and commerce, must needs be provided to an extent corresponding with the demand, and the exigences of the country; while to a more limited extent are needed facilities for acquiring the higher education of the learned professions."*

With a view to give a summary sketch of Doctor Ryerson's exposition of the system of Public Instruction which he desired to establish in Upper Canada, we insert the following additional extracts from his report to the Governor General. After combating the objection which then existed in some quarters to the establishment of a thorough system of primary and industrial education, commensurate with the population of the country, as contemplated by the Government, and as here proposed, he proceeds to say:

"The first feature then of our Provincial System of Public Instruction, should be *universality*; and that in respect to the poorest classes of society. It is the poor indeed that need the assistance of the Government, and they are proper objects of its special solicitude and care; the rich can take care of themselves. The elementary education of the whole people must therefore be an essential element in the legislative and administrative policy of an enlightened and

*Report on a System of Public Elementary Education for Upper Canada. Published by order of the Legislative Assembly. Second Edition; Montreal, 1847. pp. 9, 10.

beneficent government. Nor is it less important to the efficiency of such a system that it should be *practical* than that it should be universal. The mere acquisition or even the general diffusion of knowledge, without the requisite qualities to apply that knowledge in the best manner, does not merit the name of education. Much knowledge may be imparted and acquired without any addition whatever to the capacity for the business of life. * * * History presents us with even University Systems of Education (so called) entirely destitute of all practical character; and there are elementary systems which tend as much to prejudice and pervert, not to say corrupt, the popular mind, as to improve and elevate it."

"The state of society, then, no less than the wants of our country, requires that every youth of the land should be trained to industry and practice, whether that training be extensive or limited.

"Now education thus practical, includes religion and morality; secondly, the development to a certain extent of all our faculties; thirdly, an acquaintance with several branches of elementary knowledge."

"By religion and morality, I do not mean sectarianism in any form, but the general system of truth and morals taught in the Holy Scriptures. Sectarianism is not morality. To be zealous for a sect and to be conscientious in morals are widely different. To inculcate the peculiarities of a sect and to teach the fundamental principles of religion and morality, are equally different."

"I can aver, from personal experience and practice, as well as from a very extended inquiry on this subject, that a much more comprehensive course of biblical and religious instruction can be given than there is likely to be opportunity for in elementary schools, without any restraint on the one side, or any tincture of sectarianism on the other—a course embracing the entire *history of the Bible*, its *institutions*, *cardinal doctrines* and *morals*, together with the *evidences of its authenticity*."

"With the proper cultivation of the moral feelings, and the formation of moral habits, is intimately connected the corresponding *development of all the other faculties, both intellectual and physical*. The great object of an efficient system of instruction should be, not the communication of so much knowledge, but the development of the faculties. Much knowledge may be acquired without any increase of mental power; nay, with even an absolute diminution of it."

The foregoing is only a brief summary of Doctor Ryerson's expositions of the principles of the system of public instruction adapted

to Canada which are discussed in the first sixty pages of his report. He next devotes eighty-eight pages to a consideration of fifteen branches of instruction which he considered should be taught, or provided for if not taught, in all of the schools. The concluding fifty pages are devoted to the subject of the machinery of the system under the heads of *kinds of schools, teachers, text-books, control and inspection, and individual efforts.*

Notwithstanding the zeal and ability with which Doctor Ryerson had collected and arranged his facts, analyzed the various systems of education in Europe, (chiefly in Germany) and America, and fortified himself with the opinions of all the most eminent educationists in those countries, yet his projected system for Canada was fiercely assailed, and was vehemently denounced as embodying in it the very essence of "Prussian despotism." Still with indomitable courage he persevered in his plans and at length succeeded in 1846 in inducing the legislature to pass a Common School Act, which he had drafted in pursuance of the recommendation in his report. The leading features of that measure may be briefly summed up under the four following heads:

1. The machinery of the system was mainly adapted to the circumstances of Upper Canada, from the school laws of the Middle United States.
2. The method of supporting the schools by a uniform rate upon property, was adopted from the New England States.
3. The Normal and Model Schools, (established in 1847) were projected after those in operation in Germany.
4. The school text-books were adopted from the series then in use in Ireland, as acceptable to both Protestants and Roman Catholics.

In regard to this latter feature of the Canadian system, and in justification of the exclusion from our schools of American text-books, it may be proper to give the following explanation of that step from the pen of Doctor Ryerson himself. He says:

"American school books are unlike the school books of any other enlightened people, so far as I have the means of knowing. The school books of Germany, France and Great Britain, contain nothing hostile to the institutions or derogatory to the character of any other nation. I know not of a single English school book in which there is an allusion to the United States not calculated to excite a feeling of respect for their inhabitants or government. It is not so with American school books. With very few exceptions, they abound in statements and allusions prejudicial to the institutions and character

of the British nation. It may be said that such statements and allusions are 'few and far between,' and exert no injurious influence upon the minds of children and their parents. But surely no school book would be tolerated which should contain statements and allusions, 'few and far between,' against the character and institutions of our common Christianity. And why should books be authorized or used in our schools inveighing against the character and institutions of our common country? And as to the influence of such publications, I believe, though silent and imperceptible in its operations, it is more extensive and powerful than is generally supposed. I believe such books are one element of powerful influence against the established government of the country. From facts which have come to my knowledge, I believe it will be found, on inquiry, that in precisely those parts of Upper Canada where United States school books had been used most extensively, there the spirit of the insurrection in 1837 and 1838 was most prevalent. I am sure the Americans would not sanction the use of text-books in their schools which contained attacks upon and statements and allusions derogatory to their institutions and government."

In 1849 the provincial administration favorable to Doctor Ryerson's views went out of office, and those opposed to him came in. A member of the cabinet hostile to him having concocted a singularly crude and cumbrous school bill, aimed to oust Doctor Ryerson from office, it was without examination or discussion passed into a law. Doctor Ryerson at once called the attention of the government (at the head of which was the late lamented Lord Elgin) to the impracticable and unchristian character of the bill, as it had formally excluded the Bible from the schools. The late Honorable Robert Baldwin, C. B., Attorney General (the nestor of Canadian politicians, and a truly Christian man) was so convinced of the justness of Doctor Ryerson's views and remonstrance, that he took the unusual course of advising His Excellency to suspend the operation of the new act until Doctor Ryerson could prepare a draft of bill on the basis of the repealed law, embodying in it, additional to the old bill, the result of his own experience of the working of the system up to that time. The result was that a law was passed in 1850 admirably adapted to the excellent municipal system of Canada, so popular in its character and comprehensive in its provisions and details, that it is still (in a consolidated form) the statute under which the public common schools of Upper Canada are established and maintained.

There was one question, the agitation of which had for many years caused a good deal of disturbance to the school system, but which

was set at rest in 1863. This question was the right of the Roman Catholics to establish schools of their own, separate from the public common schools, but nevertheless aided from the parliamentary grant for education, according to the average attendance of pupils at the schools. The principle of these schools was fully conceded in the first Canadian School Bill which was passed in 1841, the year of the legislative union of the provinces of Upper and Lower Canada. It was subsequently modified in 1843, 1847, and 1850, and, (after much bitter agitation) in 1853, 1855, and finally in 1863. In the resolutions for the confederation of the British North American provinces, agreed to at Quebec by representatives from all of these provinces, and adopted by the Canadian Legislature in 1865, the right of the Roman Catholics in regard to these separate schools were confirmed as follows:—"The local legislature of each province shall have power to make laws respecting education; saving the rights and privileges which the Protestant or Catholic minority in both Canadas may possess as to their denominational schools, at the time when the confederated union goes into operation."

In 1853, after a good deal of delay and discussion, Doctor Ryerson prevailed upon the legislature to revise the grammar school law of the province, which had remained in the statute book accomplishing comparatively little good since 1807—1839. Even then (in 1853) the principle of local taxation for these schools, as applied to the common schools, was not adopted by the legislature in regard to the grammar schools. For twelve years longer these schools continued to languish. In 1865 the grammar school law was still further improved, and a higher standard of education adopted, but as yet the principle of local taxation for the support of these schools has been but partially concurred in by the legislature, and embodied in the amended act. It provides, however, that a sum equal to the half of the legislative grant (independent of school fees) shall, as a condition of receiving the grant, be raised from "local sources," i. e., by rate, subscription, municipal grant or otherwise.

In 1850, Doctor Ryerson made his second educational tour in Europe, and while in England he made preliminary arrangements for establishing the Library, Map and Apparatus system in connection with his department, which was not fully completed until 1854.

In 1854 the present system of free public school libraries was fully established by Doctor Ryerson in Upper Canada, aided by the Council of Public Instruction. The list of approved books includes about 8000 volumes, embracing works in every department of human

knowledge and learning. From this extensive list the local school authorities are authorized to make selections. The same system was also adapted to the supply of the schools with approved prize books, maps, charts, apparatus, and other requisites; and the legislature has granted the necessary funds to enable the Educational Department to do so. The principle upon which these funds are made available for the benefit of the schools is, as follows:—Whenever a municipal or school corporation contributes a sum of money for the purchase of library or prize books, maps, apparatus, etc., at the Educational Depository, the Department contributes an equal amount, and supplies those corporations with articles (at a reduced rate of from 20 to 25 per cent. below retail cost) to the value of the sum thus augmented, or rather doubled. Thus a premium is held out to local exertion and liberality, and each locality is aided according to its works. By Departmental regulation nothing is supplied from the Depository to private parties, but only to municipal or school corporations.*

In 1855, Doctor Ryerson, while in England, took steps, as authorized by law, to establish Meteorological Stations in connection with the County Grammar Schools of Upper Canada, aided by Colonel Lefroy—for many years director of the Provincial Magnetical Observatory at Toronto—he selected sets of suitable instruments, (which were duly tested at the Kew Observatory,) and shortly afterwards several of these stations were established. In 1865, the law on the subject having been amended, twelve stations were selected and put into efficient working order. These stations are situated at various points on the margin of Lakes Ontario, Erie, Huron, Simcoe, Bay of Quinte, River St. Lawrence, and the Upper Ottawa river; the rest are situated in central places inland.

In 1857, Doctor Ryerson made his third educational tour in Europe; and before returning to Canada, he procured at Antwerp, Brussels, Florence, Rome, Paris, and London, an admirable collection of copies of paintings by the old masters, statues, busts, etc., besides various other articles, for an Educational Museum in connection with the Department. This Museum was founded after the example of what is being done in England by the Imperial Government as a part of the system of popular education—regarding the indirect, as scarcely secondary to the direct, means of training the minds and forming the taste and character of the people. It consists of a collection of school apparatus for Common and Grammar Schools, of Models of Agricultural and other implements, of specimens of the

*For further details in regard to some other features of the Upper Canada public school system and its essential features of difference from the American system, see *American Journal of Education* for 1856, Vol. I, pp. 191-201. For Statistics, see Vol. XIII, 640-61.

Natural History of the Country, Casts of Antique and Modern Statues and Busts, &c., selected from the principal Museums of Europe, including busts of some of the most celebrated characters in English and French History; also copies of some of the works of the great Masters of the Dutch, Flemish, Spanish, and especially of the Italian Schools of Painting. These objects of art are *labelled*, for the information of those who are not familiar with the originals, and a descriptive historical catalogue of them can be purchased at the Museum. In the evidence given before the Select Committee of the British House of Commons, it is justly stated that, "the object of a National Gallery is to improve the public taste, and to afford a more refined description of enjoyment to the mass of the people;" and the opinion is at the same time strongly expressed, that as "people of taste going to Italy constantly bring home beautiful modern copies of beautiful originals," it is desirable, even in England, that those who have not the opportunity or means of travelling abroad, should be enabled to see, in the form of an accurate copy, some of the celebrated works of Raffaele and other great Masters; an object no less desirable in Canada than in England. What has been thus far done in this branch of public instruction, is in part the result of a small annual sum, which, by the liberality of the Legislature, has been placed at the disposal of the Chief Superintendent of Education, out of the Upper Canada share of the School Grants, for the purpose of improving school architecture and appliances, and to promote arts, science and literature by means of models, objects and publications, collected in a Museum in connection with this Department, and arranged under the following heads:—

I. SCULPTURE: 1. Antiques. 2. Modern. 3. Architectural.

II. PAINTINGS: 1. Italian School. 2. Flemish School. 3. Dutch School. 4. Miscellaneous Dutch and Flemish. 5. German School. 6. French School. 7. Spanish School.

III. ENGRAVINGS: 1. On Steel and Copper. 2. Lithographs.

IV. HISTORY OF ART, &c.: 1. In French and Italian. 2. In English.

V. OTHER OBJECTS: 1. Illustrations of Mediæval History. 2. Maps and Plans in Relief. 3. Specimens of Natural History. 4. Geological Specimens. 5. Models of Agricultural Implements. 6. Philosophical Models and School Apparatus.

In 1858–60, Doctor Ryerson took a leading part in a discussion in the newspapers and before a Committee of the House of Assembly in favor of legislative grants to the denominational colleges of Upper

Canada. His views in regard to such colleges, as forming part of the public educational system of the province may be gathered from the following extracts from his writings on this subject. He says:—

“I lay it down as a fundamental principle, that religious instruction must form a part of the education of the youth of our country, and that that religious instruction must be given by the several religious persuasions to their youth respectively. The Common Schools are, as a general rule, brought within an hour's walk of each family in the land; and therefore the oversight and duties of the parents and pastors of the children attending these schools are not, in the least, suspended or interfered with. The constitution or order of discipline and liturgy of each religious persuasion, enjoins upon its clergy and members to teach their children the summary of religious faith and practice required to be taught to the children of the members of each persuasion. *To require*, therefore, any sort of denominational teaching in Common Day Schools, is not only a work of supererogation, but a direct interference with the liturgical or disciplinary codes and functions of each religious persuasion, and providing by law for the neglect of clerical and parental duties, by transferring those duties to the Common School teacher, and thus sanctioning immoralities in pastors and parents which must, in a high degree, be injurious to the interests of public morals. Economy as well as patriotism requires the schools for all to be open to all upon equal terms, and upon principles common to all—leaving to each religious persuasion the performance of its own recognized and appropriate duties in the religious teaching of its own youth. In such schools the children can be with the teacher only from nine o'clock in the morning until four o'clock in the afternoon of five or six days in the week; while during each morning and evening, and the whole of each Sabbath, they are with their parents or pastors, and these are the portions of time which usage and ecclesiastical laws prescribe for religious studies and instruction, and for which the teacher, who only sees the children during six or seven of the working hours of each secular day of the week, ought not to be held responsible and with which he cannot be burthened to the advantage of the children, or without criminal neglect on the part of their parents and pastors.

“But in respect to Academies and Colleges the case is different. These are institutions which cannot be brought within an hour's walk of but very few of those who wish and are able to resort to them. Youth, in order to attend such institutions, must, as a general rule, leave their homes, and be taken from the daily oversight and instructions of their parents and pastors. During this part and period of

their education, the duties of parental and pastoral care and instruction must be suspended, or provision must be made in connection with the Academies and Colleges for such oversight and instruction. Youth attending such institutions, are at an age when they are most exposed to temptation—most need the best counsels in religion and morals—are pursuing studies which most involve the principles of human action, and the duties and relations of human life. At such a period and under such circumstances, youth need the exercise of all that is tender and vigilant in parental affection, and all that is wise in pastoral oversight, yet they are far removed both from their parents and pastors. Hence what is supplied by the parent and pastor at home, must be provided in connection with the Academy and College abroad. And therefore the same reason which condemns the establishment of denominational common schools, justifies the establishment of denominational Academies and Colleges, in connection with which the duties of the parent and pastor can be best discharged."

Although the project failed at the time, the economical views which Dr. Ryerson then put forth in regard to the management of the provincial University were afterwards substantially adopted by those who had so strenuously resisted them before; and although he warned them of the inevitable multiplication of denominational Colleges and Universities should their views prevail, it is a singular fact that no less than three additional denominational Colleges in Upper Canada were, in 1866, invested by the legislature with University powers. In acknowledgment of his eminent ability in this contest the Senate of Victoria College conferred upon him, in 1861, the degree of LL. D.

In 1860, Doctor Ryerson induced the Government to submit to the Legislature a draft of a bill which he had prepared for the further improvement of the system of public instruction in Upper Canada. This law perfected the details, and made it more effective.

In 1867, Doctor Ryerson made his fourth educational tour in the United States and Europe, with the following instructions from the Governor General in Council:—

"To add to the collection of models and works of art for the proposed Provincial School of Art and Design, and to engage the services of a properly qualified master from the graduates of the Government Schools of Art and Design, to take charge of the same. He is also authorized to visit and collect information from the best institutions in the United States and in Europe for the education of the Deaf, Dumb and Blind, to be made available in the proposed Schools for these persons, to be established by the Government in Upper and Lower Canada."

Since his return in 1868, Dr. Ryerson has submitted to the Legislative Assembly a "Special Report on the systems and State of popular education in several countries of Europe, and the United States of America, with practical suggestions for the improvement of public instruction in Upper Canada," closing with an intimation of his purpose to make a separate report on Institutions for the Deaf and Dumb and Blind in different countries.

In a communication quoted in the (Ontario Province) Journal of Education, referring to this special report, (which at this time we have not seen,) Dr. Ryerson observes:

"As the result of observations and reflections, I believe in our common schools we have the advantage of any country or state I have yet visited. But I believe that in some of the practical details of the working of the law, important improvements can be made, especially in the more efficient inspection of schools, and in means to prevent the best teachers from early leaving their profession. The examples of Holland and Switzerland on these and several other subjects, will be very suggestive to us. The system of elementary instruction in the former was established when Holland was the Batavian Republic; that system has survived three revolutions—exists, with slight modifications, yet still non-denominational, after half a century's trial, in its entire integrity—receives small appropriations from the State, (which yet oversees everything,) and places Holland at the head of popularly educating countries. In some of its largest cities, there is reported not to be a child of ten years of age, of sound mind, that cannot read and write. In Switzerland—a country hardly one-twelfth the size of Upper Canada, though with twice our population—there are no less than twenty-five republics, each with its own educational system—presenting in many instances, very remarkable results—thus affording an interesting and suggestive study for the educationalist and statesman in a country like ours."

Without being prepared to adopt the very favorable estimate formed by Dr. Ryerson of the system of public instruction in Upper Canada—now the Province of Ontario in the Dominion of Canada—we cite at the close of this article the opinion of an excellent judge of the value of Dr. Ryerson's labors in inaugurating and administering this system—and fortify both by the following tabulated summary of the progress of the system from 1844 to 1866:

A GENERAL STATISTICAL ABSTRACT,

Exhibiting the comparative state and progress of Education in Upper Canada, as connected with Universities, Colleges, Academies, Private, Grammar, Common, Normal, and Model Schools, from the year 1842 to 1861. Compiled from returns in the Educational Department.

SUBJECTS COMPARED.		1842	1843	1844	1845	1846	1847	1848.
9	Free Schools reported in operation (included in No. 7 above.)	480,055	no reports	no reports	no reports	no reports	no reports	no reports
10	Grand Total Educational Establishments in operation in Upper Canada,	141,143	1,785	2,700	2,837	2,708	2,863	2,858
11	Total Students at	no reports	no reports	no reports	no reports	no reports	no reports	no reports
12	Total Pupils attending Academies and Private Schools,***	no reports	no reports	no reports	no reports	no reports	no reports	no reports
13	Total Pupils attending Normal and Model Schools for Upper Canada,	no reports	no reports	no reports	no reports	no reports	no reports	no reports
14	Total Students and Pupils attending the Common Schools of Upper Canada,	no reports	no reports	no reports	no reports	no reports	no reports	no reports
15	Total Pupils attending the Roman Catholic Separate Schools,	no reports	no reports	no reports	no reports	no reports	no reports	no reports
16	Total Pupils attending the Common Catholic Separate Schools,	no reports	no reports	no reports	no reports	no reports	no reports	no reports
17	Grand Total, Students and Pupils attending Universities, Colleges, Academies, Grammar, Private, Normal, Model, and Common Schools,	no reports	no reports	no reports	no reports	no reports	no reports	no reports
18	Total amount paid for the Salaries of Common and Separate School Teachers in Upper Canada,†	65,978	65,978	96,576	110,002	101,912	128,380	135,185
19	Total amount paid for the erection or repairs of Common and Separate School Houses, and for Libraries and Apparatus, Books, Fuel, Stationery, &c.,†	\$106,000	no reports	\$206,856	\$236,056	\$271,624	\$310,396	\$344,976
20	Grand Total paid for C School Houses,	no reports	no reports	no reports	no reports	no reports	no reports	no reports
21	Total amount paid for	do.	do.	do.	do.	do.	do.	do.
22	Total amount paid for	do.	do.	do.	do.	do.	do.	do.
23	Amount received by ei	do.	do.	do.	do.	do.	do.	do.
24	Grand Total, paid for i	do.	do.	do.	do.	do.	do.	do.
25	Total Common School Teachers in Upper Canada,	do.	do.	do.	do.	do.	do.	do.
26	Total Male	do.	do.	do.	do.	do.	do.	do.
27	Total Female	do.	do.	do.	do.	do.	do.	do.
28	Average number of months each Common School has been kept open by a qualified Teacher,†	do.	do.	do.	do.	do.	do.	do.

A GENERAL STATISTICAL ABSTRACT,—Continued

	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	1858.	1859.	1860.	1861.
1	523,304	603,443	689,551	553,839	508,937	577,912	507,632	534,685	504,576	508,055	575,549	575,549	1,306,001
2	259,258	259,258	259,258	259,258	259,258	259,258	259,258	259,258	259,258	259,258	259,258	259,258	259,258
3	30	30	30	30	30	30	30	30	30	30	30	30	30
4	30	30	30	30	30	30	30	30	30	30	30	30	30
5	157	157	157	157	157	157	157	157	157	157	157	157	157
6	2	2	2	2	2	2	2	2	2	2	2	2	2
7	3,671	3,659	3,985	3,998	3,045	3,300	3,384	3,301	3,031	3,773	3,648	3,554	3,910
8	no report.	523	18	18	32	44	41	81	100	94	105	115	109
9	no report.	3,419	3,553	3,683	1,052	1,177	1,311	1,363	1,707	1,656	1,908	2,002	2,002
10	3,076	3,419	3,553	3,683	3,386	3,386	3,710	3,915	3,915	4,298	4,572	4,572	4,446
11	773	684	632	751	756	806	1,100	1,335	1,135	1,135	1,135	1,135	1,135
12	1,180	2,070	2,070	2,070	2,070	2,070	2,070	2,070	2,070	2,070	2,070	2,070	2,070
13	3,048	4,615	4,557	5,084	4,440	4,573	4,573	4,573	4,573	4,573	4,573	4,573	4,573
14	400	370	306	645	735	693	643	772	746	772	772	772	772
15	138,465	151,891	169,159	179,587	194,736	204,168	223,977	243,325	262,673	283,092	298,598	301,704	316,957
16	17	17	17	17	17	17	17	17	17	17	17	17	17
17	144,406	159,678	175,805	189,310	203,888	215,256	240,917	262,858	285,314	306,056	314,546	339,630	346,745
18	535,912	653,716	801,308	8428,948	8449,764	8578,808	9080,106	8779,890	8880,522	8777,616	8859,285	8885,591	8918,113
19	no report.	556,756	677,306	8100,366	8128,072	8175,472	8219,164	8298,428	8351,936	8395,519	8550,731	8564,183	8723,205
20	do.	\$410,472	\$468,644	\$520,314	\$617,836	\$754,340	\$909,272	\$1,078,109	\$1,192,156	\$1,043,135	\$1,110,046	\$1,159,774	\$1,101,414
21	do.	no report.	Included in other Ed.	do.	do.	do.	do.	do.	do.	do.	do.	do.	do.
22	do.	do.	\$131,326	\$147,856	\$174,104	\$174,104	\$5,711	\$9,311	\$10,708	\$2,884	\$7,830	\$6,037	\$4,824
23	do.	do.	\$590,980	\$677,870	\$707,940	\$698,336	\$1,155,082	\$1,320,092	\$1,405,387	\$1,318,072	\$1,389,582	\$1,446,448	\$1,476,107
24	do.	do.	\$3,076	\$3,386	\$3,386	\$3,386	\$3,386	\$3,386	\$3,386	\$3,386	\$3,386	\$3,386	\$3,386
25	3,386	3,076	3,377	3,386	3,386	3,386	3,386	3,386	3,386	3,386	3,386	3,386	3,386
26	2,363	2,407	2,521	2,541	2,501	2,506	2,508	2,623	2,767	2,805	3,115	3,100	3,031
27	704	779	780	647	588	1,031	897	1,067	1,386	1,237	1,150	1,161	1,305
28	576	917	91	91	91	91	91	10	10	10	104	104	104

* An approximation only—no specific information having been received by the Department. † A decrease—caused by the institution of an Entrance Examination for the Grammar Schools. ‡ Including Normal and Model Schools & being received since. § Balances due but not collected were included in and to the Grand Total (94.) of the unexpended balances we should have at the close of the year. ** Academies included until 1851. *** Academies not included until

GENERAL STATISTICAL ABSTRACT, (continued.)

d	1862.	1863.	1864.	1865.	1866.
1					
2	403,302	412,367	424,565	426,757	431,612
3	13	16	16	16	16
4	91	95	95	104	104
5	342	340	257	260	296
6	4	3	3	3	3
7	3,995	4,013	4,077	4,151	4,222
8	103	120	147	152	157
9	3,111	3,228	3,450	3,593	3,741
10	4,554	4,587	4,595	4,696	4,860
11	1,373	1,820	1,820	1,820	1,931
12	4,982	5,352	5,589	5,754	5,179
13	6,784	6,653	5,718	5,965	6,462
14	700	700	700	800	800
15	329,033	344,949	354,330	365,552	372,320
16	14,700	15,859	17,365	18,101	18,575
17	357,572	375,333	385,522	397,992	405,267
18	\$959,776	\$987,555	\$996,956	\$1,041,052	\$1,066,820
19	\$272,217	\$260,892	\$288,302	\$314,827	\$320,353
20	\$1,231,993	\$1,254,447	\$1,285,318	\$1,355,879	\$1,537,233
21	\$73,211	\$76,121	\$75,854	\$81,562	\$87,055
22	\$7,502	\$3,470	\$6,139	\$5,251	\$17,653
23	\$22,574	\$287,768	\$369,068	\$374,514	\$328,065
24	\$1,535,940	\$1,621,806	\$1,636,079	\$1,717,906	\$1,820,006
25	4,406	4,504	4,625	4,721	4,749
26	3,115	3,094	3,011	2,930	2,925
27	1,291	1,410	1,614	1,791	1,864
28	10½	10½	11½	11½	11½

The following intelligent and impartial testimony as to the success of the Rev. Dr. Ryerson's labors in Canada, is taken from a recent report of the Rev. James Fraser, M. A., Assistant Commissioner of the English and Scotch Schools Inquiry Commissions, who was specially deputed to proceed to America to report upon the systems of education in operation there. At the close of an elaborate and most careful analytical report on the school system of Upper Canada, Mr. Fraser concludes as follows:—

"Such, in all its main features, is the School system of Upper Canada. A system not perfect, but yet *far in advance*, as a system of national education, of any thing that we can show at home. It is indeed very remarkable to me that in a country, occupied in the greater part of its area by a sparse and any thing but wealthy population, whose predominant characteristic is as far as possible removed from the spirit of enterprise, an educational system *so complete in its theory and so capable of adaptation in practice* should have been originally organized, and have been maintained in what, with all allowances, must still be called successful operation for so long a period as twenty-five years. *It shows what can be accomplished by the energy, determination and devotion of a single earnest man.* What national education in England owes to Sir J. K. Shuttleworth, what education in New England owes to Horace Mann, that debt education in Canada owes to Egerton Ryerson. He has been the object of bitter abuse, of not a little misrepresentation; but he has not swerved from his policy or from his fixed ideas. Through evil report and good report he has resolved, and he has found others to support him in the resolution, that free education shall be placed within the reach of every Canadian parent for every Canadian child."—Pages 278, 279.

VIII. THE GERMAN UNIVERSITY:

COMPARED WITH THE ENGLISH AND FRENCH.

BY A GERMAN.

An Academic Discourse by Prof. H. Von Sybel, at Bonn, March 22, 1868. Translated from the German by A. Angerer, A. M., for the American Journal of Education.

THE German Universities of our day enjoy a high and not unfounded reputation all over Europe. While among ourselves there is scarcely any discussion as to the leading principles on which superior instruction is conducted, and some slight differences exist only on the advisability of introducing some foreign, but in themselves useful secondary objects: we see our great neighboring nations of France and England put in question the existing organization of their Universities from their very foundation, demanding extensive reforms, and continually holding up as models the German high schools. "There is no doubt," says Mr. Grant Duff, a member of the British Parliament, one of the best judges on matters of instruction in Europe, "that the German Universities, although open to criticism are far in advance of us in every point of real efficiency." "A small German University," observes one of the most renowned *savans* of Paris, M. Renan, "with its awkward professors and half-fed private docents, renders more service to science than all the ostentatious wealth of Oxford." Such praise cannot be otherwise than in a high degree flattering to our national pride, but will, above all, to the true patriot, become an incentive to serious self-examination. Do we actually occupy the height assigned to us by those friendly voices? Does our own activity promise a continuation of this happy condition secured by our fathers? Can we not learn from foreign countries as well as they from us? Modern improvements bring about constant interchange of ideas and habits among nations in every sphere of public life: is it not possible that a similar interchange should take place in regard to the Universities?

Considering their actual condition, the institutions which in Germany and England are designated by the common name of Universities, and which have been created in France, partly under other names, for the same purpose of superior scientific instruction, are totally different things. In France there is, as yet, no institution for superior education, which, like our University, combines all branches of science within its sphere. There are schools of jurisprudence, of medicine; faculties of theology and belles-lettres; there are institutions, like the *Collège de France*, which unites in its halls a group of various disciplines. The method of teaching and objects of instruction are very different in these various schools. Some, like the *École des chartes*, may be compared

to our Seminaries; others are intended only for the quickest possible training of their pupils for some practical vocation.

We are reminded of the exterior arrangement of our Universities by the great institutions of the *Collège de France* and the *Sorbonne*; but after the first observation we discover that even there we find ourselves in a totally different world. M. Renan lucidly describes their condition: "The Paris professor opens his lecture-hall to the public gratuitously. He knows not how many students, desirous of learning, he has, nor how many idlers in want of entertainment there are among his hearers. He knows not whether to-morrow a single one of to-day's auditory will occupy a seat, and whether he will not address an entirely different audience. Thus each lecture must be something complete in itself, and in its form be arranged and shaped for rhetorical effect, as the sensitive taste of a highly cultivated and spoiled public demands. If this is done by a man of genius, who has a profound and methodical learning at his command, the result is seen in discourses which rank among the highest master-pieces, and which neither German nor English institutions can ever present. But it will be easily seen that this series of independent discourses is anything but a scientific school. The lecturer must spend the greater part of his strength on the literary form of his discourse; frequently he uses up all means in this direction and covers the deficiencies of the contents by brilliant oratory; under the most favorable circumstances he presents literary productions, complete and finished in themselves, conclusive results of a long continued research, in which, however, the pain and labor of research is carefully hidden. In this way it is absolutely impossible, in the course of a semestre, to treat a subject in a scientific method in its entire bearing, and, what is more important, the hearer knows nothing about the mental operations by which the results presented to him have been reached. He hears, for example, a discourse on the deeds of Alexander the Great, but gains not the slightest insight into the philological and historical studies required for its preparation. In one word, matter of science is furnished, but scientific investigation remains untaught. The high school is no longer a place for original contributions to science, for the best methods of interrogating nature, but charms of style and delivery are the marks of the successful teacher. "The danger of France," says Renan, "consists in this: we are becoming a nation of brilliant lecturers and fine writers."

The totally opposite way, in academic instruction, has been taken in England. Here the complaint is not that the University is too little of a school, but that it does too much, almost exclusively the work of the school. The tutor, the repetitor, has crowded out the professor. The professor delivers a dozen lectures per year in the manner of Paris rhetorician. The instruction proper is given in the colleges, entirely in the form of our gymnasiums. The leading object, which determines the direction and material of Oxford studies, is not the training of the student for a practical vocation; nor is it to introduce him to science in its pro-

founder character, but it is the development and formation of general capacity, of the ability to think and speak, of facility in combination, soundness of judgment, skill in expression: it is the object of our gymnasiums, as said before, only taken in a higher sense and more fully developed, according to the riper age and more advanced degree of culture of the student. All tends to this superior view. The external condition of schools is munificently provided for. It is an established rule that the students of a college should live together, be under constant surveillance, and arrange their studies upon the plan of the institution. The advantage of these arrangements is now seriously doubted; the advocates of these regulations do not lay so much stress on the prevention of excesses, as by living closely together the possibility of infection grows as well as the possibility of control; they ascribe more importance to the secure and noble bearing of the gentleman, which is acquired by constant intercourse with companions of good society. In regard to the matter of instruction, they have predominantly the ancient languages, mathematics, some history, certain reflections which are called philosophy, and for the future clergy a little theology. The study of professional science is generally left to the first years after the close of the academic course. The University lecture appears only in an occasional public discourse; generally the form of teaching is tutorial; the teacher develops, questions, hears recitation, has compositions written and criticises the same. In every respect one sees the preponderance of the general pedagogic object, and in this regard the results are not at all insignificant. One of the most prominent members of the party of reform at Oxford acknowledges that the historic-philological treatises of older students testify to an eminent and delightful development and maturity of mind. The young authors take a skillful hold of the subject, bring light to bear on its various sides by penetrating debates; develop thoughts of frequently surprising sharpness and practicability, and by style and essence show themselves ready men. "They form," says Pattison,* "without doubt, the very flower and hope of England for the next generation." But not less characteristic is the other side of this relation. If we inquire after this independent and original knowledge, which lies at the root of this elaborate composition, we find but little. The young author discourses with a cultivated political reason on the effects of the constitution of Solon; but he has never read anything on this subject outside of Grote's History of Greece. The material thus obtained at second hand he knows how to use more artistically than many of our learned seminarists, the results of their own study of original authors. But in regard to the next product of inquiry he remains everywhere dependent upon his modern authority; he knows not from experience what emancipation of the individual mind, scientific thoroughness and free depth of thought mean. "It is," says Pattison,

* Suggestions on Academical Organization, with special reference to Oxford. By Mark Pattison. London, 1868.

with striking expression, "as if our Universities were destined only to teach in perfection the art of writing leading articles." Corresponding to this characteristic of scholars is, naturally, in light and shade, the quality of teachers. In the background we see a great number of mysterious and well instructed schoolmasters; in the whole the development of science in England takes place elsewhere than in the Universities. Thus we see, from opposite starting-points, both French and English education arrive at the same result. "We are in danger of becoming a people of fine writers," says Renan. "It seems as if our youth should learn only to write editorials," declares Pattison. Both, and their countrymen with them, direct their eyes to the German University. They find here not inconsiderable defects; they are in part of opinion that our Universities reached perfection thirty years ago and have since declined; but in the main organization, in the leading principle, they profess still to see a safe source, the main-spring of intellectual revelation for other nations.

If we further inquire which of our arrangements they particularly admire, to what principle assume our superiority, their uniform answer is: *the constant union of research and instruction*. It is not anything external which they esteem; not the corporate privileges which in France are very lightly thought of, and which in England they believe themselves to have in excess; not the academic liberty of student life, which in England is deemed license; no, the praise of strangers touches the heart of the subject and designates truly the just foundation of all the good we have. Our Universities are good educational institutions, not only because they impart instruction, but because they are workshops of science; because a continued scientific production is the inspiration of all their teaching. For this purpose the state gathers the best scientific talent of all Germany as teachers around the Universities, so that the example, of daily occurrence in France and England, of a man of acknowledged learning and power, without academical connection, is among us very rare. For this reason every academic appointment is based, first and last, on literary activity and the capacity of scientific production as well as on ability of teaching in a formal sense. We demand of our Universities that they prepare young men for the future practice of various professions of life; but we do not expect them to fulfil this task in a mechanical and compendiary manner. We do not wish them to impress on the memory of students, in the shortest and most practical manner, those facts and items of knowledge which are necessary to pass an examination, or for the trial year in the profession. On the other hand, we do not require in our *doctors* the highest ability in skillful lecturing at Universities as the public of Paris demand of theirs. Our object is mainly seen in imparting to the student the method of his science, in order to enable him, not to become necessarily a learned man, but to pursue his vocation, whatever it may be, in a scientific spirit and with scientific power. Above all, he must know what science is, how scientific work is done, and what scientific creative power means. As

far as the limited powers of man allow, the teacher must move in fresh, original production in his discourse; the student shall, above all, be educated by taking an intuitive part in the process of development of thoughts; whatever in later life may be his vocation, in his academic years he must be a disciple of science and nothing else, because the best preparation for any profession is the acquisition of scientific soundness, quickness and independence of mind.

Our meaning will be more manifest if we glance at the relations of the University to the gymnasium. The gymnasium among us, as the public school in England and the lyceums in France, pursues the same ultimate object—the general training and invigoration of the mind. It selects its matter of instruction, not in reference to its immediate utility in after life, for some use is to be found in every kind of knowledge, but from the consideration of what study will prove the best discipline of the mind. In France, in passing to the University, this distinction disappears altogether; the French faculties are professional schools, which offer a ready scientific course as professional preparation for some practical vocation. In England, in an opposite way, the University is no more than a continued gymnasium; the formal cultivation of the mind is still, as before, the ruling object of instruction. Between these two extremes the German University holds the middle ground. In the material for instruction it pursues the professional preparation for a special vocation; in the method of teaching, it retains in view the object of formal universal culture. Outwardly considered, it consists of a number of professional schools, which, though united in place and corporate fellowship of their members, yet are perfectly independent in their work. In this independence they are, however, intimately connected by a common method of instruction. While in professional schools the choice of material and form of instruction is essentially determined by the demand, to make the student as quick and as universally as possible useful for the exterior duties of his future practice, our academic professional branches, as taught, introduce the student, as deeply as possible, into the working of science and thereby give to the mind the highest manly development. In this they continue the work of the gymnasium, not, as in English Colleges, only in larger extent, but also in a higher degree.

The gymnasium cultivates Latin and Greek in order to exercise the faculty of thinking and speaking in general in the well settled forms of a foreign language; it presents to its pupils the picture of classic antiquity, and the great facts of the Christian religion, in order to direct their aspiration towards morally high and pure objects. Undoubtedly the gymnasial training of the mind is not yet perfect. After the mind, on this preparatory stage, has begun to work by the conception of general impressions, it is necessary that it should justify its progress by the concentration of its powers for a special purpose on a special science. The student becomes master of a spiritual power only when he has made an unlimited use thereof; when he has tested it in

some serious problem, with full effect. This, in the nature of things, is impossible without a separation of the branches of science. The youth, who has just left school, cannot begin an independent scientific research into theology, jurisprudence and medicine at the same time. He must limit himself to one branch in order to penetrate to its depths. While the University invites him to this concentrated and deeper investigation, he continues, notwithstanding the separation of branches, the universal formal education, in the most effective manner, to its perfection.

As means of culture the gymnasium employs the scientific material offered in the philological, historical and mathematical curriculum. It exercises its pupils on the text, as settled by the most learned philologist; it teaches them historical facts as the latest historical research of the age has established them: neither teachers nor pupils pretend to accumulate new and rare knowledge by researches of their own, or to establish themselves independent of the masters of the subject by their own criticism. But such aims are the very element of life at German Universities. They are the very places where learned research, scientific criticism, literary progress are carried on. Their teachers are the organs of the automatic scientific spirit; their students are educated for industrious concentration as well as for mental independence. If any exists, this is the absolute sign of true academic culture. It is not necessary, as it is not possible, that a young man traverse the entire extent of his science from its foundation to the latest discovery, with a perfect knowledge of its literature, in six or eight semestres. Such an encyclopædic effort would be discursive and not deep, and result in superficiality instead of thoroughness of attainment. But it is essential that the student should derive a clear conception of the object of his science and of the processes by which it fulfils this object; it is necessary that he go through these operations himself in some, at least in one, point, where he may say to himself, there is nobody in the world who can teach me anything further on this subject; here I stand firm and safe on my own feet and decide by my own judgment. This consciousness of mental independence, gained by his own efforts, is an inestimable advantage. It is of no moment what subject has been the first in his investigation and which led to this result,—enough that it has, in ever so little a point, broken the dependence of the school; it has tried the strength and the means with which every new problem can now be seized and brought to a similar solution; in the joyous juvenile period it has ripened youth into manhood. As yet he knows not many nor varied things; but he has realized the meaning of "knowledge"; to the slumbering mind is given forever the consciousness of its power and the direction for the ennoblement of the soul in a self-determined speciality.

If, in the above discussion, in order sharply to describe this point, I appear to contrast methodic research and encyclopædic knowledge, I trust my purpose is not misunderstood, as if I would decline the acquisition of a good method, forego altogether the most varied industry in

the collection of facts; as if it were possible to dig deeply without having the control over a certain breadth of soil. The question is only in what direction and for what use knowledge is gathered. He who works in the independent methodical research will soon discover that with every step the demand grows upon him; that in order to perfectly solve a question he must enlarge his knowledge on all sides; that the weight to be lifted becomes heavier every day; but he will also feel that his strength grows daily, that his movements become more secure and more easy. That which was yesterday a burden, hard to remove, has to-morrow become a locomotive. Yea, even more! He who works in this spirit annuls the apparent separation of academic professional schools, the faculties, and reestablishes, in his own part, the living unity of the *universitas literarum*. In ancient forests groups of trees are found, four, five, powerful trunks close together, which show their tops extended to all the points of heaven; if you approach you discover that all originated in the same root, all sprang from one germ in the depth of the earth. Thus it is with the various disciplines of science. Their branches extend in all directions; he who digs into the depth finds their common root. Whoever follows a juridical problem into its last results must deal with fundamental questions of morals, philosophy and religion. He who will thoroughly investigate a problem in history will meet at every step legal, religious and political considerations. In like manner it is with all branches. In one word, he who will make, in any part of science, original, fundamental, conclusive work, is obliged, acting self-moved and independently to take his position towards all the fundamental problems of existence, towards the world and God. This is the highest fruit propagated by the system of instruction at German Universities. If the German nation, within this century, has had the strength for a most powerful progress in all spheres of life, the most important lever of ascent has been found in the training of her superior schools. We can over estimate the gain that our most important institutions of instruction, the advantage, which our Universities give, in their emancipation of the human mind. In all early instruction, authority necessarily governs the whole being, and in later life practice, and with it, again, authority encompass a considerable part of existence. But in one period in his life at least shall every cultivated man on German soil be assured by all the organs of authority, governmental and educational, that he enjoys spiritual freedom. From the depth of his own soul, with the light of independent knowledge, to open his own way through life, such is the aim placed before students by the system of German Universities. Let the individual, as the result of these studies and labors, take this or that direction; let him become liberal or conservative, reactionary or progressive, orthodox or heretic: essential for us is only, no matter what he be, that he has become so, not from habits of youth, unsettled disposition, traditional obedience, but from scientific reflection, critical examination, independent resolution. Then,

and only then, will he be numbered among the masters of his profession, the powerful representatives of his party, the effective organs of his confession, the ornaments and honors of his nation; then, and only then, will he be recognized as belonging to the aristocracy of mind, which belongs to no particular social rank, one of the men of true culture.

In these brief sentences I have attempted to present the characteristic features of German Universities. I know but too well what I have expressed is not what we always accomplish, but what we demand of ourselves. I readily agree that the great masters in the first decades of our century have in a higher degree realized the ideal than is given to us, their successors. Not every man is gifted with the power and the opportunity to carry the banner onward to brilliant victories; what we demand of every German youth is, to remain true to this glorious flag and in his modest sphere devote to its service the strength of his life. And upon the whole, firm and true have hitherto been both the teachers and students of German Universities. The essential character of the high schools, as established in the beginning of the century by Scheiermacher and Fred. Aug. Wolf, Süvern and Fichte, W. von Humboldt and Altenstein, has been preserved in its distinctive features unto this day. During the first years after the war of independence (war of 1813 against Napoleon I.,) it felt the pressure of political conditions, the immature desire of a part of the students to participate direct and practically in the fiery political questions of the day, and in consequence of this the police reaction of 1819, which placed the Universities in general under a restraining tutelage. Since 1840, theological and confessional considerations have sometimes had more influence on some points of the academic relations than is wholesome for religion and science, and the storms of 1848 have not passed over the German high schools without leaving their traces. But such disturbances have never been of any lasting effect; on the contrary, the system of academic instruction, which I have tried to describe, has made considerable progress in Southern Germany and that part of Europe which had been hitherto entirely closed to its spirit.

Notwithstanding this happy result our picture will be incomplete and consequently inaccurate if, with the light, we do not introduce the shade. I need not mention smaller and special defects, such as appear at all times in all the works of man's hand. I confine myself to one fact, because, as far as I can see, there is in it a danger which strikes at the very root of our entire academic life, and because its effects already begin to be felt; and herein, if anywhere, the observations of foreign critics are justified, that our acknowledged superiority will assuredly end.

For at least a century University attendance has been limited to three years, seldom extending through the fourth. This may have sufficed one hundred years ago, but to-day it is altogether inadequate for the mastery of any of the faculties. The immense increase of scientific material, as well as the greater depth and multiplicity of special disci-

plines, have doubled the work of the student both in intensity and in extent. And as the power of the individual is not greater in the nineteenth than in the eighteenth century, it follows that the work done in the same length of time is inferior in quality or quantity. Three or even four years signify now no more than the same number of semestres. If the work of the University must cover certain subjects within certain prescribed limits, a positive diminution of scientific production is inevitable. Besides, if the year of military service is made to fall in this period of University attendance, there is no possibility of cultivating that feeling for science which requires continuous prosecution, and which it is the great purpose of the University to effect. There is no faculty, no profession in which two or even three years will suffice to do the present extent of work, to prepare properly for the examination, even in that preparation which the drastic language of students call "beating in." But as this examination is a condition precedent to all future official appointment, all the diligence of students is necessarily devoted to this end;—hence all independent research, all practice of scientific method, all philosophical and historical confirmation of professional studies must be, in most instances, abandoned. Complaint is made of mere utilitarian study, of work which aims only at securing future subsistence, of the superficial materialistic ambition of our youth. But the youth of to-day and of a previous generation is still the same; it is still enthusiastic, still eager for knowledge, still hungry and athirst for intellectual freedom; it is still healthy human nature in the freshness of young existence. But young men, as well as old, must live, and until this can be assured, we cannot expect they will strive for something superior and nobler.

And herein we find much in England to admire and envy. From those who acknowledge the superiority of the scientific results of our Universities, we learn that England has provided in national grants, and in a long succession of aid endowments, for the spiritual culture of her youth. The annual surplus income of Oxford for a single year—the sum unappropriated to the payment of professors—would defray all the expenditures of the largest German University for a year. The amount awarded in prizes and scholarship exceeds the entire income of the University of Bonn. This munificent revenue of the English University is not a grant of the government, on which we, in the absence of individual liberality, are compelled to rely, but springs from foundations established by beneficent individuals, who have thus erected to themselves monuments in the perpetual succession of ingenuous youths, whom their liberality has stimulated to greater exertions.

A perfectly competent witness recently summoned before a British parliamentary committee, in answer to an enquiry as to the educational condition of Germany, declared: "All essential defects in the German University spring from one want—the want of money." If by this want is meant the want of means to reduce the expenses of necessary residence, or to

enable students to complete the scientific work provided for them, the witness is correct. It is my firm conviction that the vital problem of University prosperity and progress with us is to enable a majority of our students to prolong their residence for at least five years. Until we can provide the means, it would be cruel to many and injurious to most, to require an examination which necessitates a longer residence than at present. Its immediate effect would be the exclusion of a very large and very talented portion of our young people from an academic education. It will be better to secure a prolonged period of optional study by stipends and premiums. This can be done in the same way that similar devotion to special professional preparation is secured in the Seminaries. These Seminaries are in the most prosperous condition—supplied with competent teachers and enthusiastic students—and in them the work of the University is carried on and out to its legitimate conclusion. Originally limited to theology and philology, they now exist for jurisprudence, history and the natural sciences, and in them are trained teachers and professors for our gymnasiums and the Universities, as well as able jurists and theologians. Most of them are able to award to diligent students a stipend of twenty dollars—an amount too small to be accounted hardly more than a mark of success, and yet capable of being applied to the moderate expenses of residence. How much would thorough scientific study and culture be promoted if these stipends could be increased and multiplied! and especially if they could encourage and secure attendance on University lectures for one or two years after the doctorate examination has been passed, which, with a majority of students, being the legal goal, is also the seeming limit of voluntary sacrifice. This is one of the directions in which the example, set by a commercial house in Bonn, can be followed with immense advantage to our German nation by wealthy citizens of this and other provinces of Prussia.

The example of England can be a model for our academic institutions in still another direction. Some years ago Dr. Doellinger, in an excellent discussion on German Universities, raised the question, whether the revival of the ancient *bursae* were not possible or advisable; arrangements for the exterior life of students, as they are before our eyes in the English Colleges; boarding establishments under the administration of officials of the academy, like the one which King Max. II., of Bavaria, has founded on a grand scale and on excellent principles. He who is inclined to dismiss a similar proposition as untimely or in opposition to our custom, had better see with his own eyes how much in the life of our students is injurious to physical health and strength, and consequently to mental ability and freshness for work, and then form his judgment as to the benefits likely to be derived from practical measures directed to this point. It is understood that under all circumstances the fundamental principle of academic freedom should be maintained. Nobody should be forced to join a particular establishment or restrained from entering it. A certain domestic order would be guaranteed where many

live together; but it should not pass beyond the most necessary regulations, and, above all, the choice of subjects, time and scientific method of study should in no manner be hampered. The German University asks no other diligence than that which flows from the individual will of the student; it must desire arrangements which furnish the exterior basis and vital necessities for this diligence, respecting, always, as first and last, the principle of individual liberty.

If in this, or any other manner,—for means and ways for a good purpose are many,—we should be able to retain a portion of our students at least ten semestres at the University, the result would be great. The endangered scientific thoroughness of study, which is considered the characteristic object of our entire system, would be again assured. It would then become possible to deliberate in what manner the most effective impulse for a connection of professional studies with a general philosophical education could be given to members of professional and special faculties. Finally we would be so situated as to counteract, by positive means, the tendency for bread study. Until then every accusation of utilitarian motive and end against the young students must be declared unjust and undeserved. I would not dare to speak thus with such emphasis if, from an experience of many years, I did not know that our students will not misinterpret me; for the cause of this apparent defection from the old idea of University study lies not in this disposition; now, as heretofore, the great majority expresses the conviction that even under privations and sacrifice true and profound science is their great aim in life. It is the duty and the interest of the nation to enable her sons to train themselves by a severe service in science for the highest practical service of the fatherland.

We all know that the present situation of the state will not authorize the expenditure of large sums for any other purpose than the defence of our country. But does not the preparation for national defence include the question whether the nurseries of our statesmen, officers and teachers should maintain their former elevation or be degraded to mere training schools for professional routine? We also know that in our Prussian state, which, during half a century, has signalized every new advance in civilization, as well as the completion of its martial victories, by the creation of a University; every proved want in matters of instruction will be supplied as far as the national revenues allow. Where these are limited, the spontaneous action of individuals, communes and provinces must seek occasion to supply them. The whole people, in addition to the desire for political liberty, have gained the consciousness of national independence, and we hope entertain clear convictions that common action alone can lay the solid foundation of national liberty.

In dwelling on the superiority of our Universities I have not hesitated to point out, with perfect candor, existing defects. Fortunately for our country the time is past when it was considered a want of patriotic prudence to discuss publicly the advantages of other countries, in any respect,

above our own. That was a time of unhealthy, and therefore pretentious, weakness; there was a sensitiveness, even in subordinate matters, because in the main there existed the feeling of dislocation and confusion. These days are past. Thanks to the resoluteness and firmness of our great monarch a period of consolidation, unity and higher development has begun in the life of the German nation. We live, as yet, in a period of transition. The duty rests on our people to keep the musket by the side of the plow and the book. But the decisive step has been taken. Germany rests in its newly united strength; the nation has regained self-consciousness. Now it can extend the most searching examination into every part of its life; it no longer objects to learn the advantages of other countries on any point whatever. For if formerly it feared the disregard of neighbors, it knows now that, for the first time in six hundred years, foreign nations have, with little affection so far, a deep respect for the German name. This is the work of the King of Prussia, the head of the German Confederation, whose birth-day anniversary we celebrate this day. Long live His Majesty, King William the First.

NOTE.

The writer of this article is the author of a History of the French Revolution which, both in its German and English dress, is attracting much attention at the present time. His discovery, three years ago, of some original manuscript letters of Marie Antoinette was one of the marked events of the day and called out much debate as to their authenticity, which was completely established by the Bonn professor. He is the editor of the *Historische Zeitschrift*, the leading Review of Central Europe that is devoted to historical subjects; and his opinion has great weight on all points on which he speaks.

INCOME OF OXFORD ENDOWMENTS.

Prof. Pattison in his recent "*Suggestions on Academical Organizations with especial reference to Oxford*," states that of the net income of Oxford endowments, £125,000 (over \$600,000) are appropriated to prizes, scholarships and fellowships; about £32,000 for the payment of professors, and lecturers, (besides a like amount derived from fees of tuition;) and £28,000 to the Heads of Colleges, and a smaller sum to the library, museum, &c.

MASTER SANDS NILES'S SCHOOL, STONINGTON, CONN., 1764—1700.

From the recollections of one of his pupils.

"MASTER NILES" was the first, and for many years, the sole teacher at Stonington, Long Point, (now the Borough.) This school district was set off about 1764, and in the course of the same year, Master Niles* began to teach, at a salary of £40, (afterwards increased to £60,) per annum. Two generations of the boys and girls of Stonington passed under his rod, for he was still teaching in 1790 odd. Of these, my grandmother, Mrs. Fanny Noyes, now, (1865,) in her 90th year, is probably the only survivor.† Among her schoolmates were some who made for themselves more than a local celebrity. Commodore Isaac Chauncy was one of those, who, in his time, smarted under the old master's ferule. Capt. Edmund Fanning, the navigator, whose "Voyages" made one of the most popular books of its class, and his elder brother, Capt. Nathaniel Fanning, who sailed with Paul Jones, and was captain of the maintop when the *Bon Homme Richard* fought the *Serapis*, were indebted to Master Niles for whatever education they had at school.

When my grandmother entered his school—about 1787 or '88—he had grown old in the service. The teacher's office was no sinecure. Vacations came rarely; indeed there was no such thing as a vacation in the modern sense of the term. It is said that for more than twenty years Master Niles was not absent from his post longer than two or three days consecutively; and at such times, his place was supplied by a relative whom he had trained to the work, as an occasional assistant. The scholars had always the weekly half-holiday, and on Saturday forenoon the only exercise required of them was the recitation of a portion of the Assembly's Catechism, after which school was dismissed at an earlier hour than on other days.

There were two sessions daily—from 9 to 12 A. M., and 1 to 5 P. M. The scholars sat on long benches or forms, before flat, counter-like desks which were fastened to three walls of the school-house, on the sides. A large open fire-place, (made for burning four-foot wood,) was at one end of the room, and distributed what heat it could over a limited space. But wood fires availed little against the "thorough ventilation" which weather-cracks, and shrinkage, and broken glass ensured to this, as to most other school-houses of its day; and in winter the scholars suffered greatly from the cold. On one side of the fire-place was a closet, the depth of the chimney, for hanging hats and outside garments; on the other, a narrow entry, where the bell was hung. This bell—a somewhat unusual appendage to a village school-house of the last century—had been obtained from a foreign ship wrecked near Stonington harbor.

The studies had no wide range. Reading and spelling, writing, arithmetic—with lessons in navigation and surveying to some of the older boys—constituted the whole curriculum. But what was taught, was taught thoroughly. I have never met with one of Master Niles's pupils who was not a good reader, a good writer, and a good speller. At eighty-nine, the one whose recollections of the school I am now recording, writes (and by the way, without glasses,) the same

* Master Niles was a son, or nephew, of the Rev. Samuel Niles, of Braintree, (who wrote a *History of the French and Indian Wars*;) studied for the ministry, became a "Separatist," or "Strict Congregationalist," and subsequently united with the Baptist church. He printed, in 1788, a tract entitled "Some Short Remarks upon a late Anonymous Writer on Baptism."

† Deceased, October, 1867.

neat, plain, copper-plate hand which I have seen in her school-copies, and which is refreshing to eyes which have been tried by the penmanship of young ladies taught in modern fashionable schools. The old-fashioned writing has a stiff look and wants a certain grace, it is true; but it looks as if it was meant to be read, which is, after all, about the only use to which writing can be put. (An acquaintance, who received an invitation to tea not long ago, told me that it was only by a careful enumeration of acute angles that he could guess whether he was asked to meet a few *friends*, or a few *fiends*.)

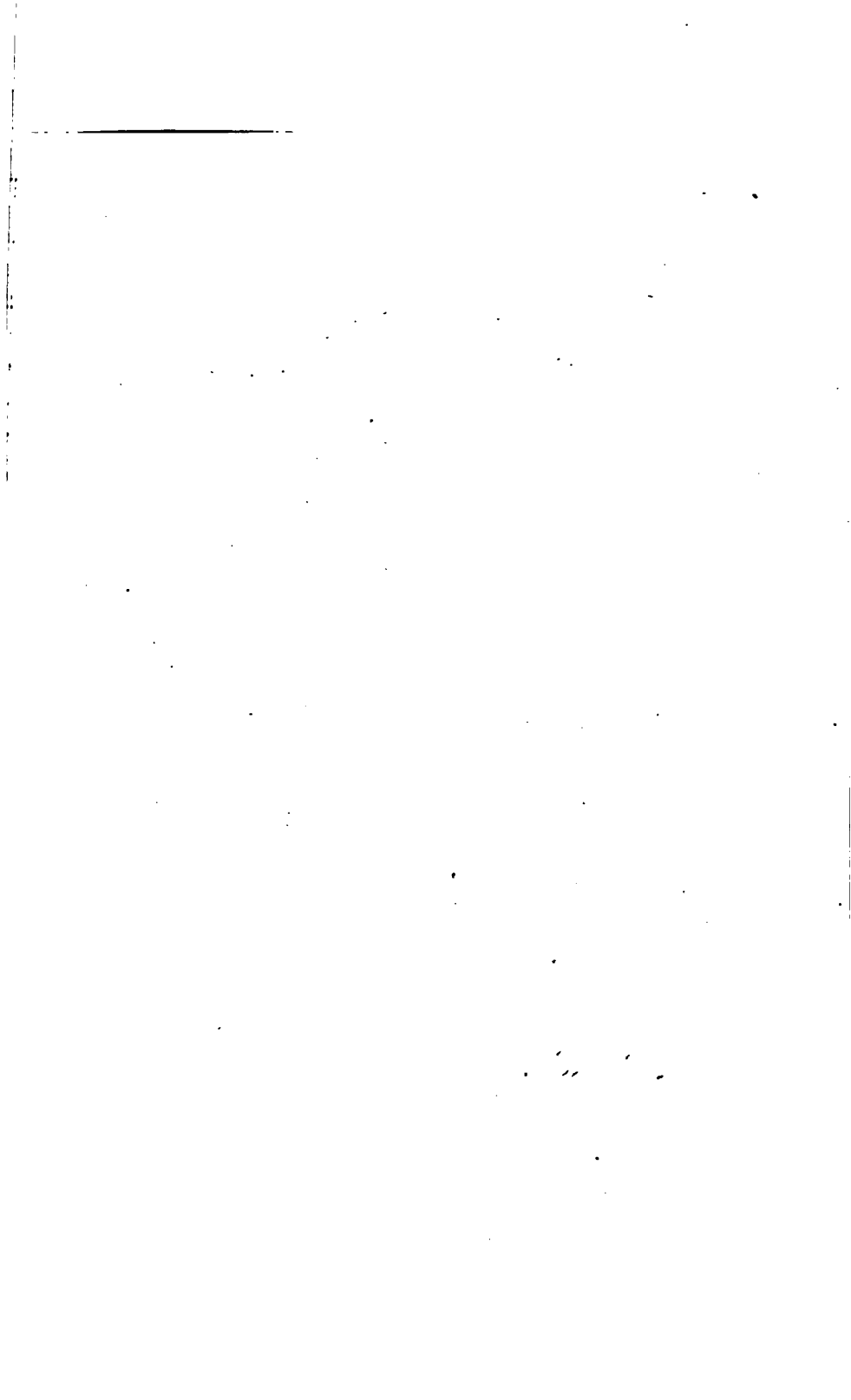
Arithmetic was taught without other "system" than the Master's "cyphering book" supplied. Each scholar was expected to transcribe this into a book of his or her own—by way of writing lesson; and to learn the rules, and work the sums, as they went on with the copy. For teaching the proper mode of holding and managing the pen, a lead pencil or bit of stick was passed under the third and over the second and fourth fingers, and, thus held, the scholar traced, with a quill, the outline of a circle or capital O, which was cut in every desk.

The afternoon of Friday was appropriated to a spelling exercise in which the whole school took part. There was no "choosing sides," but superiority was determined by the least number of "misses." Every scholar was allowed to give out a word, or rather, to write and hand it to Master Niles to be proposed to the school. Every "miss" was entered in his book, and at the close of the exercise, the name of the scholar who had the least number of marks was declared as best speller, and some trifling "reward of merit" was assigned to him or her. The words might be selected from any English book, including proper names; but occasionally the selection was restricted to the Bible, and then the proper names of the Old Testament became the *tours de force*. My grandmother has not yet lost the benefit of these spelling lessons, and can spell her way, without hesitation, from Adonizedek to Zurishaddai—through Chepharhaammonai, Mahershalalhashbaz, and Nebuchadnezzar.

Sometimes the whole school studied together, and *aloud*, the lessons which were to be committed to memory. The multiplication table, tables of weights and measures, &c., were learned in this way—forty or fifty scholars repeating aloud their "Twice one is two, twice two is four," &c.

Master Niles was severe, not to say brutal, in his punishments. Rod and ferule were constantly at work, and their dispensation was tolerably impartial—the "big girls," or, as we should now call them, young ladies, receiving their full share. Sometimes the scholars managed to retaliate, by fastening crooked pins in his chair cushion, and by divers exploits of similar character, not unpracticed by modern school boys. One girl whom he had cruelly feruled devised an original revenge. The master had a special dislike of *perfumery*—amounting to antipathy—and most of all, disliked *bergamot*, the popular perfume of that day. Miss Tripp procured a phial of bergamot essence and wheedled one of the big boys into emptying it, unobserved of the master, among the curls of his full-bottomed wig. As the hated odor found its way to his nostrils, he became first wrathful—then sick—*very sick*—and finally was obliged to dismiss school in haste, that he might relieve his stomach and subject his head and its covering to thorough purification. He once compelled one of the larger boys, for some more than usually heinous offence, to sit on the hearth of the great fireplace, while he poured *hot ashes* on his head.





THE American Journal of Education.

[NATIONAL SERIES,]
No. 4.—SEPTEMBER, 1868.

CONTENTS.

	Page.
✓ PORTRAIT OF MRS. ALMIRA LINCOLN PHELPS,.....	909
✓ I. AMERICAN EDUCATIONAL BIOGRAPHY,.....	611
Mrs. Almira Lincoln Phelps,.....	611
Memoir,.....	611
List of Publications,.....	620
Notes on First and Last School,.....	620
Note—Boarding Round,.....	621
II. FRENCH VIEWS OF FEMALE EDUCATION,.....	623
STUDIOUS WOMEN; by Monseigneur Dupanloup, Bishop of Orleans,.....	623
The Aim and Merit of Woman.....	623
Examples of Studious Women in the Early Christian Ages,.....	624
Study—a Duty,.....	625
Danger of Ignorance and Frivolity,.....	626
Advantages of Intellectual Labor,.....	629
Dangers of Intellectual Cultivation,.....	630
The Home of a Studious Woman,.....	631
Bad Education,.....	633
Continuous Study and Work—Right Bringing Up,.....	634
Pursuits allowable to Women,.....	635
A Plan of Life and a Methodical Order,.....	638
✓ III. THE EXAMPLE OF PRUSSIA IN THE PROFESSIONAL TRAINING OF TEACHERS,.....	641
DWIGHT'S TRAVELS IN THE NORTH OF GERMANY IN 1825-6,.....	641
Elementary Schools and Teachers' Seminaries in Prussia,.....	641
Petition in behalf of Teachers' Seminaries—1837; Drafted by Rev. Charles Brooks,....	647
✓ IV. NORMAL AND TRAINING SCHOOLS IN THE UNITED STATES,.....	651
TABLE—State Normal Schools,.....	652
CONNECTICUT STATE NORMAL SCHOOL,.....	654
NEW BRITAIN STATE NORMAL SCHOOL,.....	654
RHODE ISLAND STATE NORMAL SCHOOL,.....	656
BRISTOL STATE NORMAL SCHOOL,.....	656
MASSACHUSETTS STATE NORMAL SCHOOLS,.....	657
FRAMINGHAM STATE NORMAL SCHOOL,.....	659
Historical Discourse, Quarter Centennial Celebration,.....	663
Inauguration of the first Female Principal of a Normal School,.....	671
WESTFIELD STATE NORMAL SCHOOL,.....	681
Plan of Building,.....	682
Philosophy and Mode of Teaching,.....	685
BRIDGEWATER STATE NORMAL SCHOOL,.....	689
Plan of Study and Instruction,.....	690
Remarks at Dedication of Normal School-house,.....	692
SALEM STATE NORMAL SCHOOL,.....	697
Dedicatory Discourse, Gov. G. S. Boutwell,.....	701
NEW YORK STATE NORMAL SCHOOLS,.....	703
ALBANY STATE NORMAL SCHOOL.....	703
OSWEGO STATE TRAINING SCHOOL,.....	713
MICHIGAN STATE NORMAL SCHOOL,.....	719
YPSILANTI STATE NORMAL SCHOOL,.....	720

	PAGE
IOWA NORMAL SYSTEM.....	725
State University.....	725
NEW JERSEY.....	729
Historical Development.....	729
Trenton State Normal School.....	731
Farmum Preparatory School.....	733
Plan of Building.....	739
ILLINOIS.....	745
Normal University.....	743
Plan of Building.....	746
PENNSYLVANIA.....	752
Millersville Normal School.....	752
Edinboro Normal School.....	753
Mansfield Normal School.....	753
Kutztown Normal School.....	754
WISCONSIN.....	755
Historical Development.....	755
Platteville Normal School.....	758
MINNESOTA.....	761
Winona State Normal School.....	761
Plan of Building.....	765
CALIFORNIA.....	769
San Francisco State Normal School.....	769
KANSAS.....	771
Emporia State Normal School.....	771
MAINE.....	773
Historical Development.....	773
Farmington State Normal School.....	773
Castine State Normal School.....	776
MARYLAND.....	777
Baltimore State Normal School.....	778
INDIANA.....	781
Terre Haute State Normal School.....	781
SOUTH CAROLINA.....	785
Charleston State and City Normal School.....	785
VERMONT.....	789
Randolph State Normal School.....	790
Johnson State Normal School.....	793
NEBRASKA.....	791
Peru State Normal School.....	792
OHIO.....	793
Historical Development.....	793
Report on Professional Training of Teachers, by Hon. E. E. White.....	795
WEST VIRGINIA.....	805
West Liberty State Normal School.....	806
Guyandotte State Normal School.....	806
DELAWARE.....	807
Wilmington State Normal School.....	807
LOUISIANA.....	808
New Orleans State Normal School.....	808
CITY TRAINING SCHOOLS.....	809
St. Louis Training School, <i>Missouri</i>	809
Davenport—Ottumwa, <i>Iowa</i>	812
Indianapolis—Fort Wayne—Evansville, <i>Indiana</i>	813
New Haven, <i>Connecticut</i>	817
San Francisco, <i>California</i>	819
Boston, <i>Massachusetts</i>	821
PLANS OF STATE NORMAL SCHOOL-HOUSE at Terre Haute, Ind.....	822
INDEX TO VOLUME XVII.....	827



I. EDUCATIONAL BIOGRAPHY.

MRS. ALMIRA LINCOLN PHELPS.

MRS. ALMIRA LINCOLN PHELPS—whose successful labors as teacher and author, especially in introducing the natural sciences into the curriculum of female schools, entitle her to a place in our Educational Biography—was born in Berlin, Conn., July 15th, 1793, the youngest child of Samuel Hart and Lydia Hinsdale. The peculiar excellencies and striking characteristics of both father and mother in their puritan piety, honesty and sincerity, as well as in their strong mental endowments, have already been set forth in the biography of her elder sister, Mrs. Emma Willard.* Almira's early training, was received under the watchful care of her parents, who early perceived her natural endowments for teaching, and taste for original composition, and assisted in their development. She early became a pupil of her sister Emma in a select school, and subsequently a member of Berlin Academy, (not then under the learned Dr. Thomas Miner,) where, at the age of fourteen, she temporarily filled the chair of instruction in which she had been placed for the purpose of discipline (as she thought undeserved)—and which occasion she improved by a timely criticism on a class recitation then going forward, and by a subsequent dissertation in the way of original composition on the proper graduation of punishment to offences committed.

Two years afterward she became in fact a teacher in a common school in a rural district in the neighborhood of Hartford, where she had some little experience in the practice of "boarding round," and also in receiving the kindness of one of the intelligent families who gave her a permanent home during her connection with the school. This experience, though brief, was not without its beneficial discipline to the young teacher; but her subsequent opportunities of enjoying the more cultivated and literary society of Middlebury, Vt., and the instructions of her gifted sister, who had invited her there, were more important, since she here pursued various studies with a view of preparing herself for the higher walks of the profession which she had already decided to follow.

In the spring of 1812 she became a member of the Academy at

*Barnard's American Journal of Education, Vol. vi., p. 125.

Pittsfield, Mass., then under the direction of her cousin, Miss Nancy Hinsdale, who was the Miss Grant or the Miss Mary Lyon of that day. Her instruction here was chiefly confined to the elementary English branches, including map drawing, with reference to pictorial effect more than to topography, in which a pupil was considered as highly accomplished who could carry home, after a few months' practice, a framed picture of "Hector and Andromache," or of "Moses in the bulrushes."

From Pittsfield she returned to Berlin to take charge of a select school in the Academy where, when a girl of fourteen her talent for instruction and discipline had been undesignedly developed; but soon accepted an invitation to take charge of the public school in New Britain, where, for the first time, a female teacher was placed in charge of the winter school of a large district—a great innovation upon the "steady habits" of Connecticut. In her examination as a candidate, she covered her embarrassment caused by her failure to answer with minute accuracy a question as to the "exact distance of the largest fixed star from the planet Mars," by reading an original essay "On the Duties and Responsibilities of the Teacher," in which she at once exhibited her technical knowledge of reading, writing, and orthography, and her appreciation of the office for which she was on examination. In the management of this school, composed, to some extent, of young ladies and gentlemen of nearly the same age as herself, she introduced many valuable exercises, not common even in the academies of the State, such as composition and map-drawing; and showed great executive ability by employing the older pupils as assistants in teaching the younger classes, thus making her school a sort of school of practice in teaching, and at the same time enabling her to instruct with profit a larger number than she otherwise would have been able to do. In this feature of her school we see not only great tact in meeting an emergency, but possibly the germ of the State Normal School, established forty years afterwards in the same district.

In the following summer Miss Hart received a few boarding pupils at the home of her widowed mother in Berlin, as well as a few day pupils from the village of Worthington and the adjacent neighborhood. In this school, while she gave instruction in drawing, painting and embroidery, as then taught, she at the same time introduced her pupils to a better knowledge of English grammar and, to some extent, of English literature, having frequent exercises in the analysis of Shakspeare and Milton, and in the practice of Eng-

lish composition, higher arithmetic and geography. It was in her subsequent school at Sandy Hill, N. Y., that Miss Hart, as Principal of an academy, with an excellent assistant, Miss Martindale, (sister of the late Judge Martindale, and aunt of Gen. J. H. Martindale,) was able to develop more satisfactorily to herself the views of education which she had gradually formed from her experience in the school-room, by substituting for superficial accomplishments, more solid attainments in English language and English literature, rhetoric, criticism and moral philosophy, and an elementary acquaintance with some of the natural sciences. Here she began the practice of making herself, and accustoming her pupils to make, written abstracts of the contents of the text-books, and presenting the substance in a condensed, logical form. Here also, she introduced the improved system of teaching geography which her sister, Mrs. Willard, had already reduced to writing, and which was subsequently published in Woodbridge and Willard's geography.

In 1817 Miss Hart became the wife of Simeon Lincoln, proprietor and editor of the Connecticut Mirror, published at Hartford, Conn., where she resided till his death, in 1823. Soon after, Mrs. Lincoln, on the invitation of her sister, Mrs. Willard, removed to Troy, with her two daughters, and joined her as a teacher in the Seminary which she had established at that place. Here she passed some eight years, both as a teacher and learner. The study of the French and Latin languages was continued. The Greek and Spanish were commenced; and no little progress was made in the higher mathematics, and the physical sciences—botany, geology and chemistry—the latter especially under the instruction of Prof. Amos Eaton, then in charge of the scientific school established by Hon. Stephen Van Rensselaer, at Troy. A new world seemed opened to her imagination in the pursuit of the natural sciences; and at the same time that she both learned and taught, she began to write on the subject. Finding no suitable class-book in botany for her pupils, she drew up a syllabus of her instruction for them at their request, and with the advice of Prof. Eaton she prepared the notes of her lectures for the press, which, under the name of "Lincoln's Botany," has been so widely used in the best schools of the country. Of this part of her experience as a teacher, Mrs. Phelps, in a private note, thus writes:

"The enthusiasm of the teacher was scarcely greater than that of the pupils, in the botanizing researches. The region around Troy is rich in its flora, and scarcely a dell, ravine, or island of the Hudson in its vicinity, was not explored in these expeditions. The young gentlemen students of the Rensselaer school were chivalric and indefatigable in their efforts to procure specimens for the ladies' herbaria, and so Botany became the fashion of the day.

"Among the past scenes which memory loves to dwell upon, as often vividly presented that of our first Botanic lectures—when in the pleasant Spring morning, soon after the sun rising, the lecture-room was filled with young girls, radiant with bright eyes and glowing cheeks, eager to obtain their share in the distribution of the fresh flowers which had been collected as the subjects of the lecture. At first, the rudiments of the Linnæan classification were illustrated by reference to the organs of fructification, and then we went on from the simple and self-evident to the more abstruse principles of the science. The subjects of physiology and natural relations among the various orders of plants, were gradually introduced, as the mind became prepared to understand them—going from the simple to the complex idea. The whole botanical course was thus a romance and a joy. But let us consider a class assembled to learn Botany by commencing with the mis-called "*Natural System*"—no flowers to begin with; some dry seeds may be exhibited, and perhaps dissected, or diagrams showing magnified sections of the embryo, cotyledons, cellular system, structure of the wood, skeleton of the leaf with its net-veined fibres, or parallel nerves, &c., &c. The pupil is not interested, and returns with reluctance to the lecture. College students and young ladies thus taught, alike are ready to say that 'Botany is a dry study.'"

We have thought it just to give the views of Mrs. Phelps upon the advantages of the Linnæan system. In the *American Journal of Education* for September, 1867, page 151, under the head of Public Instruction in Austria, the reader will find the following confirmation of her views and practices: "In zoological instruction, animals are classed in characteristic groups, and the students are made familiar with their characteristic differences, with the aid, so far as possible, of specimens and representations. Botany is commenced with organography and terminology, training the students to recognise the individual organs from the easiest to the more difficult." Here we have a strict adherence to the Linnæan method of pursuing investigations in science. Prof. Agassiz has also recently protested against throwing aside this method in Zoology, attempting what has been in a degree accomplished in Botany, to begin with general principles of physiology instead of "studying the objects in characteristic groups." Mrs. Phelps remarks, "there are indications of a reaction in Botanical science, and that the study of plants according to the Linnæan system will be found to be the best introduction to a knowledge and perfecting of the natural system. In reviewing and enlarging Lincoln's Botany, the author has not failed to embody ample instructions to aid in the study of this system, which must be regarded as the ultimate object of the science. When, as is often the case with young ladies in schools, there is little time to be given to the study of Botany, there will be found great advantages in the logical analysis afforded by this system of "*the immortal Swede*," as the great naturalists of a past generation called the Linnæus whose name and labors smaller men of the present day would consign to oblivion."

But to return to our educational history, and that period when the

grandeur of nature and the wisdom of its Author were unfolded by the light of physical science to eyes hitherto blind to those revelations. A new enthusiasm was enkindled, and every branch of the science of nature seemed to call for attention to her domain—

“Not less
The humble glow-worm lighting up its torch,
Than gilded heaven with all its blazing fires.”

But Mrs. Lincoln's rule was, one thing at a time ; and Chemistry followed Botany in its attractive developments. Under the practical teachings of the founder of the Rensselaer school (now the Polytechnic) at Troy, Mrs. Lincoln became initiated into the mysteries which it had revealed to the master minds of Europe, and in the hands of Silliman and other American chemists, had been brought home to our schools. In the laboratory which was now added to the Troy Seminary, she labored as practically as any good housewife ever did to prepare a dessert for her table. With the assistance of a Rensselaer student, she obtained the various gases, and made the preparations to illustrate by experiments her own lectures to the pupils. In due time she brought them into the laboratory, where they were trained to prepare experiments for the lectures, which they were appointed to give for the class-room, and for public examinations.

Though the establishment of the Troy Female Seminary was the work of its founder, Mrs. Emma Willard, it can derogate nothing from her merits as an educator, to suppose that, during the many years spent in that institution by her sister, in the prime of her life, she contributed not only important coöperation, but introduced some original features, and helped to give prominence to scientific studies in its educational system.

“Geology,” says Mrs. Phelps in her memoranda now before us, “then becoming popular in the country, was a favorite pursuit of Professor Eaton, whose early labors have aided later Geologists to make advances of which he then did not dream.” As a kindred science with Botany and Chemistry, she penetrated the strata of the earth's foundation, believing then that *primitive*, *transition* and *secondary* formations would be the landmarks for all future time ; and this she said in her “*Geology for Beginners*,” a small volume which she never had the courage to revise, as the science has so shaken off its old distinctions, and become essentially changed by the force of new discoveries.

In 1831 Mrs. Lincoln became the wife of Hon. John Phelps, a prominent lawyer and statesman of Vermont, where she soon after

went to reside, and where, with the approval and encouragement of her husband, she continued her literary pursuits, enlarging and revising her "Botany," and bringing out, at the request of her publishers, in 1832, a smaller and less expensive work, entitled, "Botany for Beginners."

Her first attempt at writing for the press was the preparation, at the request of the authors, of the chapters on Geology, and Roads and Canals, for Woodbridge's and Willard's Geography. Her Botany, as has been before stated, originated in the desire of her pupils to have the syllabus and notes of her lectures printed, which were prepared amidst her pressing duties as teacher and vice-principal of the Troy Seminary, assisted by her daughter Jane. This book proved a pioneer in botanical studies, not alone in female schools, but in all the institutions of higher education, including many colleges. In 1829 she made a translation from the French of Vanquelin's dictionary of Chemistry, which was published with the sanction and recommendation of Professors Silliman and Eaton. In 1833 she published a book entitled "The Female Student," which was adopted in 1838, under the title of "The Fireside Friend," and published as Volume 18 of the School Library issued under the sanction of the Massachusetts Board of Education. To be associated with such authors and writers as Edward Everett, Judge Story, Washington Irving, Alonzo Potter, Francis Wayland, Jacob Bigelow, Dennison Olmsted, and others of that class, in the preparation of works for this library, must be regarded as no slight compliment to her reputation as a writer and educator.

In the summer of 1838 the Right Rev. Bishop Hopkins of Vermont, invited Mrs. Phelps to remove to Burlington and establish a seminary for young ladies, in the extensive and elegant building which had been erected in Burlington for an Episcopal institution, which she declined; and at the same time an application to become the principal of a similar institution in West Chester, Pa., was received. The latter invitation was accepted and the situation entered upon; but in 1841 it was exchanged for a similar position in an institution at Ellicott's Mills, Maryland, in which she was heartily supported by the Bishop of the diocese and the trustees of the institution. This enterprise was preëminently successful, both in regard to numbers and in the character of the education given. One feature peculiar to the Patapsco institute, was a department for training young ladies for the work of instruction. The inauguration of this department was the main consideration in deciding to remove to Maryland, in addition to its

more genial climate. It was in fact the source of the teaching corps of the institution, its pupil teachers being composed of energetic young women from New England and the Middle States, with some from Virginia, who served an apprenticeship as pupil teachers, while they were obtaining for themselves an accomplished education. From time to time these pupils went forth to become instructors in families and schools at the South, having become experienced in teaching and discipline, and, by their association with pupils of the institute, already acquainted with the feelings and customs of the section of country in which they were to labor. When circumstances made it advisable for them to leave a situation without an opportunity of consulting Mrs. Phelps, they felt confident of a kind reception from her, and thus Patapsco became a "*Teachers' Union*," and if its history from 1841 to 1856 were written, many touching and romantic incidents might be related of lovely and interesting young ladies who rejoiced to find, with her, such a home and such a mother.

In respect to the organization of the Patapsco Institute, and its methods of instruction, it is just to state that these were essentially those of the Troy Seminary, modified however by the individuality of Mrs. Phelps' mind and character, and the tastes and mental habits of southern pupils. It was not easy at first to render mathematics popular among girls who were disposed to consider accomplishments as the great requisite in education; but by establishing a regular course of studies, and awarding scholastic honors (not *medals*, but certificates and diplomas) to those only who had honorably completed this course, ambition was awakened which led to efforts that often surprised the pupils themselves, no less than their friends. Thus the study of algebra, geometry and trigonometry, as well as mental and moral philosophy, up to this time deemed by many repulsive, by degrees became not only tolerable, but in some cases fascinating.

The natural sciences were of course favorite branches of the Principal, whose books were used, and from time to time corrected according to her own observation of wants or defects, and the suggestions of intelligent teachers. The belles-lettres and metaphysical departments were full and comprehensive, and constituted an important part of the regular course of instruction. Great attention was paid to the studies of English grammar and analysis, literature and composition. Ancient languages were taught by the chaplain, and modern languages by native professors and teachers. Music, both vocal and instrumental, and drawing and painting were taught with every facility and advantage which the vicinity of a large city afforded.

In the financial and external administration of her great institution at Patapsco, until 1849, Mrs. Phelps had the valuable coöperation of her husband, who entered heartily into her educational and literary work. After a gradual decline, Judge Phelps died in 1849, having enjoyed in his failing strength the beautiful scenery of the Patapsco, and the kind and grateful attentions of the pupils of the institution, leaving to the care of the widowed mother the education of two children, a son and a daughter.*

In 1856, under the pressure of a severe domestic affliction, the loss of her eldest daughter, Jane P. Lincoln, by a railroad accident in New Jersey, Mrs. Phelps decided to leave her cherished institution and devote herself mainly to literary labors, which, at the Patapsco institution, had been confined mostly to the revision of her scientific works and the publication of the Patapsco Magazine, and in 1848, of "Ida Norman, or the Discipline of life." She accordingly removed to Baltimore, where she has continued to reside, and in the dispensation of a liberal but unostentatious hospitality, she has found time to continue her scientific and literary studies, to revise her educational publications, and prepare many articles for the periodicals.

In 1858 she published "Hours with my Pupils, or The Educator," and "The Christian Household," a donation to the Baltimore Church Home. In 1860-61, she was a frequent contributor to the National and the Church Quarterly reviews; and in 1864 she prepared for the State Fair of Maryland in aid of the Sanitary and Christian Commissions, a volume entitled "Our Country," the sale of which was an important contribution to the object for which the fair was held. In 1866 she prepared a paper on the religious and scientific character and writings of Edward Hitchcock, which was read before the American Association for the Advancement of Science, at their meeting in Buffalo, N. Y. Of this Association, Mrs. Phelps was the second† of her sex elected a member, and she had the pleasure and honor of entertaining the Association at her house, at its annual meeting in Baltimore, in 1858.

*Of the son, the following honorable record appears in Lanman's Congressional Directory for 1868:—"Charles E. Phelps, of Baltimore, was born at Guilford, Vermont, May 1, 1833; removed with his parents to Pennsylvania in 1837, and to Maryland in 1841; graduated at Princeton College, New Jersey, and afterwards at the Cambridge Law School, Massachusetts; commenced the practice of law in Baltimore; was a member of the Reformed City Council of Baltimore in 1860; entered the Union army as Lieutenant-Colonel of the Seventh Maryland Volunteers; was promoted to the Colonelcy, and was honorably discharged in 1864 on account of wounds, receiving a brevet as Brigadier General; was elected to the thirty-ninth Congress, succeeding Henry Winter Davis, and was re-elected to the 40th Congress." He declined to be a candidate in 1868.

†Miss Maria Mitchel, of Nantucket, and now (1868) professor of astronomy and director of the observatory in Vassar College, was the first, and Mrs. Emma Willard, of Troy, was the third representative of their sex in the American Association of Science.

Long may the subject of this memoir be spared to enjoy the elegant and comfortable home in Baltimore, which her own genius and industry has secured, and to receive, in her own hospitable way, the calls and visits of her many friends from every part of the country—many of whom were once her own beloved pupils, and not a few the husbands, sons or daughters of such pupils.

PUBLICATIONS BY MRS. LINCOLN PHELPS.

- LECTURES ON BOTANY, 1828.
 DICTIONARY OF CHEMISTRY, translated from the French, with a History of the Science, 1829.
 BOTANY FOR BEGINNERS, 1832.
 FEMALE STUDENT, or Fireside Friend, 1833.
 CAROLINE WESTERLY, or the young traveller, 1833.
 PROGRESSIVE EDUCATION, translated from the French of Madame Necker de Saussure, by Mrs. Willard and Mrs. Phelps, with notes and a Mother's Journal by the latter, 1834.
 GEOLOGY FOR BEGINNERS, 1834.
 CHEMISTRY FOR BEGINNERS, 1835.
 LECTURES ON NATURAL PHILOSOPHY, 1836.
 NATURAL PHILOSOPHY FOR BEGINNERS, 1836.
 LECTURES ON CHEMISTRY, 1837.
 IDA NORMAN, 1848.
 CHRISTIAN HOUSEHOLDS, 1857.
 HOURS WITH MY PUPILS, 1858.
 OUR COUNTRY, edited, 1864.

Mrs. Phelps' "*Scientific Series*," including her works on Botany, Chemistry and Natural Philosophy, are published by J. B. Lippen-cott, Philadelphia. A. S. Barnes & Co., New York, have recently published, in uniform editions, her "*Educational Series*," for school libraries, teachers, and home reading.

VARIOUS CONTRIBUTIONS TO THE BOSTON "CHURCH MONTHLY."

- ESSAYS published in National Quarterly Magazine from 1860 to 1862,
 Glance at the Fine Arts.
 Social Life in America.
 England under the Stuarts.
 Popular Botany.
 Louis XIV and Madame de Maintenon.
 The De Saussures and their Works.

- ESSAYS in the Church Review,
 Goethe—his Morals and Poetry.
 Life and writings of Lydia Sigourney.
 Review of the Atlantic Monthly on the Poets of Connecticut.

- ESSAYS written for the Philadelphia Home Weekly, in 1867,
 Our Picture Gallery—a series of thirty articles.

The list does not comprise addresses written at the request of educational societies; with numerous contributions to periodicals, &c., among which was a Review of Miss Sedgewick's Memoir of Lucretia Davidson.

In the popular movement which grew out of the attempt of the Greeks to throw off the Turkish government, Mrs. Lincoln became deeply interested, and was made Secretary of the Greek Association of the Ladies of Troy, and as such, penned most of the circular letters which were issued from that association to enlist contributions in money, clothing and food, for that country. She also took an active part in the efforts made by Mrs. Willard, for the promotion of female education in Greece, and especially the establishment of a Normal School for female teachers, at Athens.

In her visit to Paris in 1854, she had the pleasure of receiving the polite attentions of Baron d'Eichel, who had introduced into his "*Les Deux Mondes*," published in 1835, her address, read at Troy, New York, on female education in Greece.

EXTRACT FROM "NOTES ON MY EXPERIENCE AS A TEACHER."

"MY FIRST SCHOOL.—My introduction to the trials and pleasures of school-keeping, was in a district school, for the summer term, in a town adjacent to Hartford."

Of course, in this rural district, Miss Hart "boarded round;" and lest, in this progressive age, the coming generation of teachers may not comprehend this phraseology, we add in explanation, that the district system required of the instructor to itinerate among the different families of the district, remaining in each only the time required to collect by "consumption," that proportion of the tax founded on the number of pupils sent to school; and to take a meal or a night's lodging more than the assigned quota, was an act of injustice. Miss Hart's experience is thus stated:

"I have not much to say in respect to '*boarding round*,' for it was soon over, and there are pleasant remembrances connected with it. I was first sent by the committee to board for three days with a widow who had but one child in school. Those were not unpleasant days, for I fell into sympathy (as the spiritualists say) with the good woman, whom I found to be refined in feeling, though rustic in manners. Her parlor was my bedroom; and though her table was set in the kitchen, everything was neat and comfortable—the very best she had was brought forward for the teacher; and her little girl—an interesting child—was untiring in her efforts to offer something which might be acceptable. With instinctive refinement she gathered flowers as an offering, and on my table at school, were daily seen her pinks, roses and peonies.

Then came a change: a rich farmer, who also kept the only tavern in this rural neighborhood, unfortunately for the teacher, had several children in school; and so a longer probation was appointed at his house. Let me recall the table at which I found myself seated: it was of pine, without a cloth, extending through a long, low, dingy kitchen, where there was little regard to neatness. A dish of boiled salt pork and beef, flanked with potatoes and cabbage, was set in the middle of the table, two large mugs of hard cider were for all to drink from; a huge plate of black rye bread completed the bill of fare. The horn which called the men from the field, brought in the farmer and his laborers. Once only, however, was I a participant in such a meal. A young physician of the place, with his excellent wife, having compassion on the stranger, proposed to the committee to take her to board, offering such terms as he knew they would be likely to accept, and these, I believe, were somewhat less than one dollar per week. The little paradise into which I then entered, will never be forgotten. Such a box of a house! Two very small rooms, with a minute kitchen and bedroom, were all its apartments. But what a triumph of female skill in all the arrangements! My own little room had its snow-white curtains to its one small window, and its spotless white toilet cover and drapery, with a bed of unrivalled whiteness; everything was perfect. And there was just room for my one small trunk; for the district-school teacher did not require a "*dog-house*" for her wardrobe. And then our nicely prepared, though frugal meals—seasoned, as they were, with intellectual conversation, were such as the most fastidious might have enjoyed. We became attached friends; the

doctor was poor, and the perfect health which the place enjoyed was not favorable to his support; but his wife could use her needle, and besides doing all the work for her small family, she helped to bring in supplies.

The school-house was pleasantly situated upon a table-land, surrounded by old forest trees; it was a better edifice than was then generally furnished in Connecticut for that purpose. No improvement had then been made in seats, writing-desks, &c. The committee did not visit the school; but on one occasion, the mothers came by invitation. Some of them brought their babies, and others, baskets of wool to pick; the disturbance among the scholars, caused by the creeping about of the little ones, and their performances with the flocks of wool, was not to be censured, and their young teacher joined in the laugh. This was my only school examination in that, my first, attempt to teach."

"MY LAST SCHOOL.—I closed my experience as a teacher in the Patapsco Institute, under circumstances widely different from those with which it commenced in that far-off rural district in Connecticut. The site was one of the most beautiful in the whole country, occupying thirteen acres of ground, and provided with a granite building, capable, with the improvements made upon it, of accommodating, with class rooms and residence, one hundred and forty pupils, with a corps of twelve resident teachers, and all the necessary attendants,—and these were quite numerous.

The pupils represented nearly two-thirds of the several States, from California to Florida, and from Louisiana to Maine. The course of instruction, besides the preparatory studies, embraced three years: the class of Rhetoric, the class of Philosophy, and the class of Mathematics and Natural Sciences; and distributed through each, with studies appropriate to the advancement of the members, were the ancient and modern languages. The highest, or graduating class, was thoroughly trained in the studies usually pursued in our American colleges, with better opportunities than any of them afford for instruction in the modern languages, and in music, both vocal and instrumental. Besides the twelve resident teachers, there were special teachers, who came from Baltimore, in the Italian, Spanish, German and French languages, and in elocution and general literature. The whole establishment was under the direct supervision of the Principal, who also gave instruction, in her own department, of the natural sciences—botany, chemistry, etc. To the regular classes should be added the class of Normal pupils, varying from twelve to twenty, from which her resident teachers were selected, and which contributed many accomplished governesses and teachers to the families and schools of the South."



II. THOUGHTS ON FEMALE EDUCATION AND EMPLOYMENTS.

[Selected from the French of Monseigneur Dupanloup.]

THE following paragraphs are selected from a little volume of the Bishop of Orleans, translated by R. M. Phillimore—originally written in answer to opinions expressed by M. de Maistre in letters to his daughters, against any thing serious or ennobling in the education and employment of women which is not directly connected with the amusement and well-ordering of the household.

THE AIM AND MERIT OF WOMAN.

The Bishop does not attempt to controvert M. de Maistre's opinion that "the great merit, the most honorable aim of a woman, is to make her home and husband happy, and to bring up her children well, and to make men of her sons—brave lads, who believe in God, and who do not fear cannon"—but he maintains that to do this "she must have a strong intelligence, judgment and character; she must be persevering, industrious, and reflecting; as the Scriptures say, her beauty and her amiability, which are the strength and embellishment of a house must be illuminated from on high. "As the sun rising over the world, so does a good woman shine over her household." The hand which holds the spindle and looks after the details of her house, must be the instrument of a head which is capable of planning and directing. And Solomon's description is not that of a woman only occupied about material life; it is that of the wise woman, and if "her children rise up and call her blessed," it is because she has the elevated sense of the things of life; the care of souls, and the foresight of the future, because she is ready for the noblest duties and disposed for the most serious thoughts; she is the worthy and intelligent companion of a husband, "who is known in the gates, when he sitteth among the elders of the land." What I should wish to see above all things is, not a race of learned women, but—what is necessary to their husbands, their children, and their households—intelligent, judicious women, capable of sustained attention, well versed in every thing that it is useful for them to know, as masters, mistresses of households, and women of the world; never despising any labor of the hands, and at the same time not only knowing how to occupy their fingers, but their minds also, and to cultivate their souls and their whole being. And I must add, that what is to be dreaded as the very worst of scourges is the frivolous, fickle, effeminate,

* *Stodious Women*—translated from the French of Monseigneur Dupanloup, Bishop of Orleans. London: 1868.

idle, ignorant, pleasure-loving woman, devoted to dissipation and amusement, and consequently opposed to all exertion, to almost all duty; incapable of all studious pursuits, of all consecutive attention, and therefore not in a condition to take any real share in the education of her children, or the affairs of her husband and her household.

EXAMPLES OF STUDIOUS CHRISTIAN WOMEN IN THE EARLY AGES.

The biographer of the illustrious St. Boniface declares plainly, that St. Boniface loved St. Lioba on account of her solid learning—*eruditionis sapientia*. This admirable virgin, in whom the light of the Holy Spirit was added to an enlightenment laboriously obtained by study, combined a purity and a humility—virtues that are such universal preservatives—with a learning in theology and the canon law which was of the greatest service to the early Germanic Church. And, indeed, St. Boniface was so far from despising the efforts of his spiritual daughter to raise herself intellectually, that sometimes he took from his apostolic occupations hours, which he did not consider as lost, in order to devote them to the correction of her literary compositions, her Latin verses, which he answered in the same style—poetical messages, carried across the seas by martyrs and confessors.

And if, going still farther back, we examine more closely some facts in history, we shall find that, since the establishment of Christianity, women's names are often seen on those literary monuments that have been most respected by time; for instance, the celebrated Hypatia, the teacher of Clement of Alexandria; the illustrious St. Catherine, who taught Christian philosophy, and confuted the pagan philosophers in the schools of Alexandria; and, again, St. Perpetua, who wrote the account of her martyrdom and the glorious fate of her companions.

When peace was restored to the Church, and the age of the Doctors succeeded the age of the martyrs, who is there more celebrated for the seriousness of their minds and the extent of their learning, than Paula and Marcella, Melania and Eustochium, and so many other holy and illustrious Christian women:—St. Marcella, in whom St. Jerome found so powerful an auxiliary against the heretics; St. Paula, who inspired St. Jerome to undertake his noblest and most important works, the Latin translation of the Bible from the Hebrew original, and a complete commentary on all the prophets.

Nothing is more beautiful than St. Paula's letter to St. Marcella; it shows us all that the latter did to raise the soul and the intellect of the holy women and the young virgins who called her their mother, and it shows us what was the extent of St. Paula's eloquence and intellect. And, in the following century, what an aid Paulinus—who, besides being a great Saint, was the brilliant disciple of Ausonius—found in Theresia; and who ought not to know that Elpicia (the wife of Boethius) composed hymns which are adopted in the Roman Liturgy? In the middle of the barbarous ages one of the first obligations imposed on Christian virgins was to learn letters. As soon as any of them showed an aptitude for literature, they were excused from manual labor, according to St. Caesarius's precept, in order that they might give themselves up entirely to intellectual pursuits. In the greater part of the monasteries we hear of them devoted to study. They write, translate, copy, and decipher continually. St. Radegunda does not content herself with receiving, at Poitiers, one of the last of the Roman poets, but she intrusts the literary education of her nuns to him,

and as writers they soon excel their master. The writings of Baudonovia show a revival of classical purity and elegance.

All the charm of Christian inspiration is shown in a hymn improvised by a nun of Poitiers at the moment of Radegunda's death, and one of the first flowers of Christian poetry blossoms on the tomb of the holy Queen who had always been so devoted to literature. The monasteries of England, Ireland, and France teem with learned and pious women.

"It is certain, from numerous and trustworthy testimonies," writes M. de Montalembert, "that literary studies were cultivated in the seventh and eighth centuries in the women's monasteries in England, with no less care and perseverance than in those of men, and perhaps with still greater enthusiasm. The Anglo-Saxon nuns did not neglect the occupations peculiar to their sex. But manual labor was far from satisfying them. They voluntarily left the needle and the distaff, not only to transcribe manuscripts, and to illuminate them to suit the taste of the age, but above all to read and to study holy books, the Fathers of the Church, and even classical works."* St. Gertrude, in Dagobert's reign, knew all the Scriptures by heart, and translated them into Greek. She sent over the sea for Irish masters to teach music, poetry, and Greek to the cloistered virgins of Nivelles. From all these centres brilliant torches issued forth, such as Lioba, who founded the Abbey of Bischofsheim, Roswitha, and St. Bridget. It was by a holy woman that the study of Greek was inaugurated in the monastery of St. Gall. And the knowledge of the learned Hilda was so highly considered in the Anglo-Saxon church, that more than once the holy abbess assisted at the deliberation of the bishops assembled in council or in synod, who wished to take the advice of her whom they considered as especially enlightened by the Holy Spirit. But were we to enumerate all the examples of women in whom holiness has been accompanied by the gifts of the most luminous learning, the list would be too long, and we should have to go through all the first ages of Christianity.

STUDY—A DUTY.

I assert plainly that it is a duty in women to study and to instruct themselves; and that intellectual labor ought to have its separate part assigned to it, amongst their own special occupations, and their most important obligations. The primordial reasons for this obligation are important, they are of divine origin, and absolutely incapable of being rejected; they are these:—In the first place, God never makes useless gifts; in every thing that God does, there is a reason, an aim; and if man's companion is a reasonable creature; if, like man, she has been created in the image and resemblance of God; if she also has received from the Creator the gift of intelligence, the sublimest of all his gifts, it is in order to make use of it.

Besides, all the gifts received from God, in order to be of some use, ought to be cultivated. The Scriptures tell us that the soul, like the earth when it is

* *The Monks of the West*, vol. 5. This fifth volume and the two which precede it, written in the middle of a severe and inveterate illness, are prodigies of powerful inspiration, of tenderness and of elevation, and show the unflinching nature of a Christian, and a courageous soul, in the most grievous physical and moral trials. These are the books that I should like to see in the hands of every body—above all, at the present time, when we are inundated by such a wretched literature, and by so many writings of the most unwholesome description.

allowed to lie fallow, only brings forth wild fruits, "thorns and thistles." And God has not made the souls of women, any more than he has those of men, to be like a shallow, sterile, and unwholesome soil.

Again, every reasonable creature will have to give an account to God of his or her gifts; every one, according to the judgment of God, will be treated in accordance with the gifts received, and in accordance with the profitableness and the works of each.

God has given us all hands, which, according to the commentators, represent vigorous and intelligent action, but on condition that we do not return to him empty-handed. In short, He has explained Himself categorically in the parable of the talents, in which He declares that a strict account will be required of the use of every talent. And I do not know of any Father of the Church, or of any moralist, who has thought hitherto that this parable did not concern women as well as men. There is no distinction made here, each will have to give an account of that which has been intrusted to him or her; and human as well as divine good sense shows plainly enough that women, not more nor less than men, have the right to bury or to squander the gifts conferred upon them by God for the purpose of making a right use of them.

I will then say with St. Augustine, that no creature to whom God has intrusted the lamp of intelligence ought to permit herself to behave like one of the foolish virgins, in imprudently letting her lamp go out for want of trimming it; thus allowing the light to be spent, which is first intended for herself, and next, for others beside herself; and, since the question is about wives and mothers, for her husband and her children.

I say it without any hesitation, Christian morality alone teaches woman, with a decisive and absolute authority, her real rights and duties in their necessary reciprocal relation. Yes; until you have persuaded woman that she is created first of all for God, next for herself and for her own soul, and lastly for her husband and her children, but after God, with God, and always for God, you will have done nothing either for the happiness or the honor of your families.

The contrary system rests on a *Pagan view of their destiny*, and also, as has been truly said, *on the idleness of men who wish to retain their superiority without effort*. The Pagan view is, that women are only charming creatures,—passive, subordinate, and only made for the pleasure and the amusement of man. But, as I have said, Christianity has far other ideas. In Christianity the virtue of a woman, like that of a man, ought to be voluntary, noble, active, and intelligent. She ought to know the whole extent of her duties, and all the divine knowledge which can be derived from them, for the benefit of her husband and her children.

DANGER OF IGNORANCE AND FRIVOLITY.

Human nature requires to be instructed, enlarged, enlightened, and elevated in all its powers; and I must say, for my own part, that I have never found any thing more dangerous than repressed capabilities, unsatisfied desires, and a thirst unquenched. Thence arises that longing for knowledge which, for want of the good and the true, fixes on the bad and the false; thence arise those passions, naturally generous and commendable, which turn against truth and virtue; thence arise those crooked, bad, and perverse notions adopted by an ignorance which knows neither how to exercise choice, judgment, or restraint

—"conversi disruptent vos"—as saith the Scripture! Thence, in short, arise so many falls, so many shameless deeds, or, at least, such numerous and wretched frivolities amongst women! If these fine and ardent natures had been better directed, we should not have had to deplore their ruin; we should not have to groan over that sad lowness of level and mental tone—that feeble-mindedness of so many women naturally above par, who are intended to be the ornament of the world and the honor of their families, and whose education, stopped short in its development, has made perhaps elegant and accomplished women, up to thirty years of age, but has rendered them forever frivolous, ordinary, and useless beings.

I have sometimes heard mothers say that they would dread to see in their girls powers of mind rather beyond the usual run, and that they would try to repress them. "What would one do with them?" they say. "How find a vent for those great powers in the midst of that real life, which is so contracted, so paltry, and which is woman's lot at the end of the first years of her youth."

This opinion has always secretly disgusted me. What! You wish to prevent the development of the Divine flame in a soul which God has gifted with a spark of ideal life! You respect this gift in men, on condition however of its being employed in practical life, that is to say, of its being used to gain money and to add to a social position; but as the utility of great things is less lucrative among women, it is deemed more advisable to suppress them. Cut off, then, the branches of this plant, which would want too much air, space, and sun. Do away with this useless sap. But this plant ought to have become a large tree, and you are going to make a stunted shrub of it!

Ah! beware by your mutilation of making it first suffer cruelly, and finally depriving it of all life. To extinguish a soul that God has created to be a shining light, is to inflict an inward suffering that you will never be able to cure, and which will perhaps cause that soul to go astray, and exhaust its powers in vague and exaggerated aspirations. There is no torment to be compared to this sentiment of the beautiful which is quenched at its birth, to that poignant grief of a soul which, perhaps unconsciously, has missed its real *vocation*; and this word, which seems to express a call from on high, that most serious and irresistible call, is as applicable to women as to men—to the ideal as well as to the actual condition of life. "Our soul," it has been said, "is a thought of God;" that is to say, that there is a Divine plan for it, the realization of which is either furthered by our efforts or checked by our want of energy, but which does not exist the less in the Divine goodness and wisdom. And to realize it, all the development of our soul, our heart, and our intelligence is necessary. It is difficult to foresee beforehand the destination God has attached to his gifts, but it is true that He intends them for some object, and that this providential vocation, supposing that we are rigidly faithful to it, will by obeying its behests avert any dangers that we had feared from its consequences.

Above all we must consult the different natures we have to deal with, and only attempt to develop them according to their capabilities. I would not certainly create factitious talents, by means of a cultivation which is not demanded by Nature; but neither would I leave fallow a soil that she has enriched with her gifts. An incomplete development, a smattering of sciences and accomplishments, are most dangerous for a woman; they show her a higher horizon, without giving her the strength to reach it; they make her believe she knows

what she is really ignorant of, and they thus entail a disturbance, a disorder, and an ostentation which often produce lamentable aberrations.

A woman of the world, whose position obliges her to see a great deal of it, but who understands her duties and fulfills them well, wrote to me as follows: "In general, women know nothing, *absolutely nothing*. They can only talk about dress, fashions, steeple-chases, the absurdities of each other. If you turn the conversation to a subject of history or geography, or if you talk about the middle ages, the crusades, the institutions of Charlemagne or St. Louis; if you compare Bossuet to Corneille, or Racine to Fénelon; if you pronounce the names of Camoens, or of Dante, of Royer-Collard, or of Frederick Ozanam, of Montalembert, or of Père Gratry, the poor woman will be struck dumb. She can only entertain young women and frivolous young men. Equally incapable of talking on business, art, politics, agriculture, or the sciences, she can neither converse with her father-in-law, her clergyman, or with any man of a serious mind. And yet, *the first talent of a woman is to be able to converse with every body*. If her mother-in-law visits the poor and the schools, and wishes to enlist her in her pious undertakings, she neither understands their aim nor their bearing, for a good and compassionate heart is not sufficient in a certain class for works of charity. In order to acquire influence, to give any benefit its full value and moral bearing, a degree of intelligence is required, which is only attained by attentive study and reflection."

And now I must go still further, and show the fatal consequences of such a state of things for religion, for society, and for families. I will say the whole truth. I know, and I have blessed God for the sight, all that a woman, a Christian mother, is able to do in her family; how many things may be introduced by her influence, how many ideas at first decidedly rejected, are adopted by her means; religious ideas, charitable ideas, ideas of devotion, resignation, pardon, and daily work. But it must be confessed that these ideas of daily work are those which are the most rarely embraced.

The painful truth which I wish to state here is, that education, even a religious education, does not always give, and indeed gives too rarely to young girls and young women, a serious taste for mental labor. Deputies from God to the domestic hearth, guardians of the holy traditions of faith, honor, and fidelity, even Christian and pious women seem too often the enemies of mental labor, whether for their husbands or their children, and especially for their boys. I have seen some who had great difficulty in not considering as a personal theft the time which is given up to it. Was it the fault of their intelligence and their aptitude? I have never thought so—quite the contrary: and I attribute this distaste for mental labor, in the first place, to the flimsy, frivolous, and superficial, not to say, false education that is given to women; and, in the second place, to the part which is allotted to them in the world, and to that assigned to them in their families—even in certain Christian families. Women are not to study; there is to be no studying about them; they are to do nothing. They themselves do not wish to see any body really occupied around them, or at least they encourage neither their husbands nor their children to do any thing that is of a serious kind, and which requires trouble and devoted attention—and sometimes they go so far as to oppose it, when their pleasure or their liberty may suffer by it. And it is a very great misfortune; for here they have the most fatal influence! In vain we say to men: "Work; accept the offer of employ-

ment; at least occupy your time." As long as women are there to destroy the effect of our advice, our words will be in vain. As long as mothers advise their daughters not to marry a man who has a settled occupation, as long as a young woman makes use of all her arts to dissuade her husband from working, as long as the young mother does not impress upon her son the necessity of instructing himself, of cultivating his mind and his faculties as he would a precious plant, the law of labor will be despised. Yes, in the actual state of our habits, and family life being what it is, women alone can really promote mental labor, prepare minds for it at an early age, render it possible and easy; yes, even insist upon it, and bestow their esteem, their encouragement, and their admiration on its adoption.

ADVANTAGES OF INTELLECTUAL LABOR.

It is a mother's duty to attend to the soul as well as the body of her child; she can even be more easily replaced in his physical than in his intellectual and moral education. For the former so many people can help her; for the latter, unless she is surrounded by obstacles, she reigns alone. To follow the development of mind and the studies of a young man, to watch over him, to guide him with that influence that is given by a sound and authoritative judgment, by a capacity joined to kindness, and thus inspire confidence and admiration—all this implies a combination of intellectual qualities which are far from ordinary.

How many mothers have lost all power over the souls of their sons, because they have been unable to nourish and to develop their intellectual, as they had done their physical being! To be a mother, a mother in all the elevation, the extent, and the depth of the word—that alone justifies all the noble efforts of a woman to acquire the greatest superiority of mind.

No unity can last in married life, unless the fellowship of hearts is accompanied by the fellowship of minds. As a woman loses the charms of youth, her husband must perceive that her mind is developing, and love must be perpetuated by esteem. The husband, if he has capacity, is then entering into the most active period of life, he is occupied with the most varied pursuits, whilst too often his wife, having only received from her education severe principles, with the habit of futile occupations, bores him with her mechanical devotion, her music, and her canvas-work.

There are numerous serious occupations and interests which prevail more and more in a man's intellect, and with which an idle woman can not sympathize, and then that chasm arises between them which may be called *the separation of minds*. A woman, on the contrary, who has studied, shares her husband's serious occupations, she supports him in his labors, in his struggles. She follows her husband, and precedes her sons; she adopts in her home that high position which renders her the supporter and the counselor of man. She feels that her husband is proud of her, and that he requires her. She does not make a boast of it, but she rests securely on her happiness, for she is confident that nothing can disturb a union which has for its basis the perfect fellowship of two souls and two minds, and that the love of both will last as long as the souls whom it unites.

It ought to be well understood, that a woman, in becoming a Christian, has become the companion of man, "*Socia*;" and what is more, an assistance, a

helpmate, a support, and a counselor: "*Adjutorium*"—Religion, which has raised her soul and her heart, has also rendered her mind capable of understanding, sometimes of equaling, and above all of helping the mind of man. In making her weak in body, God has given her the germ of all that is great and morally strong. There are no noble works in which women have not been mixed up; at first the teachers, then the inspiring geniuses of men, and often the sharers of their labors. There are women who have devoted their minds at the same time as their lives, to a man it was their duty to love, and who have continued to share in the tone of the thoughts of which they were made the first confidants, those thoughts that unfold with greater brilliancy and vigor from the double light that shines upon them.

DANGERS OF INTELLECTUAL CULTIVATION.

Doubtless this intellectual cultivation may be accompanied by three dangers, but the remedy is an easy one.

1. *The neglect of practical duties.*—This danger must be averted by strengthening, practical education; in growing girls the habits of order and regularity, which double time, and fix a place in life for each thing that is to be done; and above all, a true and real piety, which is nothing else but the courageous accomplishment of every duty.

2. *The undue indulgence of the fancy*, which causes a craving for intellectual enjoyments, that can not always be satisfied. But here, again, all may be balanced. The important point is, that education should be made to correspond with the gifts of God, without either going beyond them or stifling them. Usually they bring with them the counterpoise of their dangers. An excessive cultivation is dangerous, an insufficient cultivation is not less so. Piety is here also a great aid.

3. *Pride and vanity.*—Good sense cultivated in a Christian point of view can alone prevent it. We must, however, observe that if the cultivation of the mind, like the attractions of the body, can excite pride and vanity, study has at least a counterpoise; it puts something serious and luminous into the mind, whilst the success produced by beauty and dress is always accompanied by frivolous or bad sentiments.

Give a woman all the knowledge, all the talents, all the development of which she is capable; and give her at the same time Christian humility—she will be endowed with a much truer and more amiable simplicity and modesty than a poor Hindoo, who thinks herself an animal of a species rather superior to the monkeys in her yard, but very inferior to the nature of her husband. This enlightened humility is a real virtue, and will become the mother of many other virtues, and the inspiration of the highest desire of perfection. For humility does not prevent us from recognizing the progress we have made, nor does it close our eyes to the merit of others; it makes us see our own deficiencies, and even if we had reached the summit of knowledge and human cleverness, it would still show us in every department a superior ideal to excite our efforts without producing pride or discouragement. Let us be well persuaded that a cultivated mind understands its duties better than any other. It is intelligent humility, that is to say, real modesty, which preserves us from pedantry. In learned women, it is not their knowledge which displeases, it is their pretension.

If I press this point, it is because my adversaries insist upon it the most of all. They still repeat, "*that is the great danger.*" But, in my turn, I also repeat, the brilliant notoriety that a literary or artistic talent can give a woman, is not the greatest cause of vanity that can be apprehended for her. As I have already said, an empty beauty and worldly triumphs fill a woman with herself in a very different way, and danger is not likely to be corrected by the cause which produces it. Study and the arts, in raising the mind, serve as a counterpoise to any vain feelings they may excite; and I see no similar guarantee in the successes obtained by advantages of another kind. The whole question is contained in these words: that great gifts are accompanied by dangers, against which education must have strengthened the possessors beforehand.

Education must adapt itself to diverse natures; in developing the germs God has placed in those natures, it must direct this development with a firm hand, and prevent its wanderings and its caprices. It must also produce a moral development, in harmony with the intellectual one; it must balance justly ideal and practical life, which are less contrary to each other than is generally supposed, and the harmony of which alone constitutes the dignity of existence. "The example of Germany," says somewhere Alfred Tonnelé, "proves that family and household life, and the fostering of true and simple affections do not exclude cultivation and elevation of mind among women; that, on the contrary, they develop and purify them. Are not those who have most emancipated themselves from household cares, the most frivolous, the emptiest and the vainest, and do we find that this independence has contributed to make them more studious or more accomplished?" I am fain to confess, however, that education is more important and more difficult in a richly endowed nature; but the task is a nobler and a more gratifying one.

THE HOME OF A STUDIOUS WOMAN.

It is in the homes of the artist, the physician, the lawyer, the judge, the professor, the learned man, that are most often seen those studious able women, who understand the arts, who themselves possess true talents, who are very well informed, without the possibility of any body calling them *blue stockings*, because their intelligence is a part of the honor and the treasure of their families, and it is by the help of this intelligence they procure ease and comfort to their homes, and even that delicate luxury with which riches have nothing to do, and which is all owing to a woman's taste. The shape of the furniture is good, and the arrangement is graceful, the engravings recall those works of art which are most preferred, and show what is liked in the house.

Flowers, pictures, books, a small but well-chosen library,* music, pleasant

* There are some women who have no books, because they must have fine editions and expensive bindings. They do not look upon books as helps to study, but as ornaments which add another elegance to the many elegancies of their abode. It is a strange thing to say, but the price of one ball-dress would suffice to purchase a good library. A person once said to me:—"I have given up reading, for only very rich people can afford to have books." I answered: "It is, usually, very rich people who do not possess them." In fact, it is an exception to find the taste for occupation and the outward signs of intellectual pursuits in certain opulent families, with whom the world absorbs every thing, and whose time and money scarcely suffice for the exigencies which are made necessities. In many unpretending and well-regulated homes, on the contrary, intellectual life has its assigned share in daily life, and the sacrifices that are voluntarily made for its cultivation, are precisely what tend to encourage it.

literature, every thing shows a home that is much lived in, seldom left, and where happiness is to be found. It is not one of those empty and magnificent abodes, whose possessors are always absent, pursuing pleasure with a feverish activity, and flying from the weariness of a home which has no charm except during the time spent in furnishing it, and which becomes a bore as soon as the gilded chairs are put in their places. In the little apartment of the third story, the mother is surrounded by her children. She brings them up herself! God be thanked, she is obliged to do so; and how she is rewarded for her trouble! She reigns over her children, who understand the merits and the sacrifices of their mother, and who love her dearly. They soon know the happiness of being born in a condition in which a mother has not fortune enough for servants, tutors, and governesses who would occupy her place. Also, what a difference between the two educations! The sons take the first places at school and at college; the girls receive that superior education which I should like to give as a model to the girls of the fashionable world. They wish to be equal to their mothers, who work with them, who direct them, follow them, and both interest themselves and take an active part in their studies. The law of labor is more incumbent on a mother than on any other creature; the soul of her child is the field that she ought to cultivate by the "*sweat of her brow*," nobody ought to take her place, and if the most complete educations are the products of the humble abodes I have mentioned, all the honor is due to those laborious mothers.

How many young men owe their coarse tastes for horses and dogs to the mercenaries that have brought them up! A mother implants other tastes and ambitions in the heart of her children when she brings them up herself. Sometimes she is a prey to the anxious thought, whether she can give enough honor and faith to the conscience of her children, in order to inspire them with the courage of bearing in their turn this humble existence, without ever consenting to increase their fortune by a base action. In her anxiety, she redoubles her efforts in educating them, for she knows their education is their dowry, and she becomes more painstaking, more virtuous, more courageous, in order to transmit to her children this admirable pride of her soul, and in order that they may obtain this grace from Heaven.

And the children who witness the exertions of their mother, have a secret desire to relieve and to reward her. The wish to do right is much stronger in these homes of humble happiness, and the satisfaction of performed duties makes every member of the family contented with his fate and cheerfully submissive to his God. The whole day is one of active exertion. The father at his work, the mother manages the house, takes the children to their classes and catechetical instructions, and in the evening each member of the family is tired with the labor of the day and wishes to remain at home. It is the hour of rest, of the children's games, the hour of talk, of reading, of music, of intimacy, and of gaiety. The day ends quietly, without that worldly whirl, which is so great a trial, even to the most virtuous and Christian-like women. A mother thus occupied can never think of giving herself up to a purely personal pursuit. She has studied whilst she was a young girl and a young woman. Now she is always at the service of others. But this disinterested labor, which is both labor and sacrifice, raises her soul and her intellect better than any other employment of her faculties. There is no fear that she will be either vain or

pedantic. And yet what an immense labor is hers, in giving her children all their lessons! One is astonished at the extraordinary efforts produced by maternal love that a mother makes to fulfill her duties. Do not marvel, then, to find her so full of capacity, so elevated, so active, so intelligent, so indifferent to the empty gossip and the frivolous coquetries of the world.

BAD EDUCATION.

What is wanting the most in the education of young girls, and in the life of young women, is consecutive study and attentive reflection. This is a serious and almost always an irreparable evil, and as it is the fault of education, I will say in a few words what I think of the education of girls, and of its deficiencies.

The greater number of girls spend seven or eight years of their education in practicing the piano, two and often three and four hours a day. But this accomplishment, to which so much time is given up, and which might enlarge the mind and the soul to so great an extent, usually only ends in those "soulless talents" of which Töpffer speaks, which derive their existence from vanity alone; talents which are both useless in practical life and "unconnected with the mind," and which are almost always given up after marriage.

This charming writer, who breaks out with so much energy against the use that is made of the arts, in the education of young people, and on what are usually called "ornamental talents," or accomplishments, exclaims:—"How many of these ornamental talents I have seen and heard, and how few pleasant ones! Girls take interest in nothing, understand but little, and do not feel at all. . . . I think, on the contrary, that they might seek in the arts, together with an amusing pastime, a refreshment for their hearts, minds, and imaginations; and derive from so many faculties, that the usual occupations of women either destroy or leave uncultivated, a result which would lend an inexpressible charm to their souls." Instead of this, music is made a sort of material study, which scarcely ever reaches the soul, and not even the most ordinary comprehension of the art! Most girls only aspire to mechanical perfection, they do not attempt to penetrate into the sanctuary of the art, and find nothing in it to raise and exercise the nobler faculties. How many spend four hours a day at the piano, and yet have no knowledge of the masters, the schools, or the styles—no æsthetic sentiment, and neither the sense nor the perception of what they are doing! "Music," says the Père Gratry, "has been transformed into a brilliant noise, which does not even soothe the nerves."

The music-masters only care about giving a rapid execution; very few endeavor to form a good style, to make the composers understood and appreciated, and to explain the connection of the ideas of harmony and melody. The result is, that these poor girls, after they have spent a good part of their lives at the piano, execute skillfully with their fingers what their minds do not at all apprehend. It is about the same as if they incessantly recited passages in an unknown tongue. No! Literature and musical æsthetics must be attended to quite as much as mechanical dexterity; otherwise the pursuit is a species of barbarism. In Germany, where music has a great share in the education of girls, it is made a more serious pursuit. They learn harmony, they ascend from mechanism to art.

Drawing is often treated in the same manner. I have seen people who drew with accuracy, and even facility, not able to distinguish between a good and a

bad picture, and who do not know whether Raphael was the master or the pupil of Perugino. Even their talent for drawing did not develop the sense of the beautiful in their minds.

The world gives up to girls the province of music, on condition that their souls shall not be raised by it, and that they will make it a means of wasting their time; and as to the plastic arts, the taste for painting is already beginning to awaken criticism, and M. de Maistre was frightened at seeing his daughter paint in oils. In one word, the arts are to be reduced to ornamental accomplishments, and the sumptuary laws are still more severe about literary studies.

At a certain age, with the exception of music and drawing, the education of a girl is considered to be finished. "Since my eighteenth year," a young lady to whom I recommended study thus writes to me, "whenever I begin to study, I am always asked if I have not finished my education." Finish one's education; that means, to write nothing but letters, to embroider, and to cultivate accomplishments, if one happens to have any!

"But," say my objectors, "young girls are taught a vast quantity of things during their education."

Doubtless they are, and this is exactly what I complain of: girls have not to take a degree, and all their education tends to give very extensive and very superficial general notions. Nothing serious, grave, or deep, but a smattering of every thing; and, as was said by an intelligent minister, "who does not know, that what is gained in point of surface, is lost in point of depth?"

General notions, and no real knowledge, ornamental accomplishments, and no serious talents, nothing which raises the soul and matures the mind; this is exactly what is wanted, to shine for a moment, and to fall short of being "*something*" and "*somebody*." This is exactly what is wanted, to leave off doing any thing, as soon as the education of the convent is over. Now, it is precisely an opposite course that ought to be adopted, if the object is to produce serious and persevering women, who may be one day useful to their husbands and their children.

CONTINUOUS STUDY AND WORK.

Work is a faithful friend at every age and to every disposition, for those who have adopted it as a companion in the journey of life, and it gives cheerfulness to the outward, and serenity to the inward man. In order to give women the habit of work, they must be impressed as girls with the fact that their education is not finished at eighteen, and that their first ball-dress does not possess, any more than a bachelor's degree for young men, the power of giving the finishing touch to their attainments. At that age they scarcely know even the primary notions that would enable them to study by themselves. They no longer want any leading-strings in their education, and that is all. They are only ready to go on and to enjoy the pleasure of working by themselves. If a girl could be made to believe this, a wise future would be her sure portion.

RIGHT BRINGING UP.

What does it mean to be well brought up? It means, to develop her intelligence, her heart, her conscience, her character, at the same time as her practical faculties, without neglecting her health, her physical strength, nor even, within due limits, her outward charms; in one word, to render her capable of forming

not only an element in the life of man, but of sympathizing with his thoughts, and to realize in marriage that intellectual union which is the perfection of a moral bond and a fellowship of interests.

There is sometimes a distinction made, in classing women, between *the useful woman, the agreeable woman, and the clever woman*. The useful woman understands business and the management of her house; the agreeable woman makes herself pleasant in society; the clever woman can both read and talk.

Well, I should say that a woman, to be what she ought, and to fulfill her mission, should combine these three things. United, they would make a harmonious being, that I should call *the distinguished woman*, that is to say, a woman capable of managing, understanding, and doing every thing in her family; a woman who can be pleasant without being flighty, careful of her dress without being frivolous; a woman who rules her life by submitting to its exigencies; who accepts the material part of it without neglecting it, but without allowing it to absorb her existence; and if I may be allowed the expression, makes it the pedestal of a higher state of being. Her soul gathers from noble sentiments and solid principles, courage enough for every form of devotedness; her intellect finds in the sense of the beautiful, in the intercourse of great minds, and the habit of serious thought, that elevated good sense which Joubert called *the exquisite form of good sense*, and which he wished to infuse into common sense, in order to render it more than ever the *primum mobile* of human life; the wise common sense which would be as solicitous about material as well as all other interests, and which, in that science of life which is above all other sciences, would know how to regulate all its elements, and give to every want of the mind and body, to every mental aspiration and every social relation, the part conformable to the order, the duty, and the dignity of the soul of man.

The best stimulant for women is the taste for the beautiful, which finds its own reward in the noble enjoyments it affords, in the dignity it imparts, and the assistance that it renders to its votaries. But, however this may be, the principle which, in our opinion, ought to predominate in the education of women is incontestable. If the qualities which ought to be combined in a woman are separated, what is the consequence? A useful managing woman, that is, a woman who is a pedant in her own way, tiresome, graceless, incapable of coping with any thing but material life; or a woman of outward show, a frivolous woman, reigning over dress, or rather allowing herself to be ruled by it; or, finally, a variety of the clever woman or of the woman of letters who, in order to mimic man, forgets the charms, the gifts, as well as the duties of her sex.

PURSUIITS ALLOWABLE TO WOMEN.

The pursuits, even according to M. de Maistre, which are allowed to women are:

1. *The best Literature.* Serious and agreeable literature, which is a very wide field, and possesses both a substantial and a superficial charm. To speak only of *History*, the field is indeed an extensive one. It even comprehends a philosophy which their minds are perfectly capable of understanding, and the ideas of which—partaking at the very least of the nature of essential ideas—are necessary in order to fix their “mobile” minds, and to give them accuracy.

To teach a woman to reason aright, and consequently to put duty before every thing else, this is essentially educating her, in a way that is necessary for all classes and all conditions.

2. *The Arts*; which suit so well their imagination and the grace and delicacy of their natures. And here I can not help remarking, before I proceed, that the most dangerous of the arts is freely conceded to women, an art which is really the most incompatible of all with their duties and their vocation, while the pure and elevated regions of intelligence are considered not to be their province. Several men who depreciate women's æsthetic writings and performances in art, would not on any account do away with female singers and tragic actresses. But the answer to this will be, that it is precisely because women artists degrade themselves more or less, that virtuous women can not be artists. Certainly, I quite agree, and even go farther than merely agreeing, but I can not help adding, that at least the fact is recognized, that women are capable of taking a high position in art, and that some among them have received the Divine gift. If they have received it, then it must be in order to make use of it, honestly and nobly, without doubt; but *to make use of it*. This very fact refutes the restriction.

3. *The Beautiful*. If a woman is able to express this, she is able to express it in all its diverse languages. Art is identical to itself in its principle, whatever mode of expression it adopts. Painting, music, poetry, eloquence; the beautiful expressed in language, the beautiful expressed in style, or by an inspired voice, is always the same beautiful which has taken a perceptible form to reveal itself to our souls through the medium of the senses. Every one can invest it with a form, which is, however, not a matter of choice. If you allow one form to women, and that form the most frivolous and the most dangerous of all forms, why forbid them the others? It is not because they lower themselves with the art which caters to your pleasures, that they are therefore unable to raise themselves with noble, honest, and serious art. If a woman can be a singer, she can also be a musician in the elevated sense of the word; she can also be a writer and a painter.

4. I have elsewhere said, how far, in my opinion, a woman can take up the sciences, and, indeed, study agriculture. This last operation has created some astonishment. I will only answer this by quoting some fragments of a letter that a very remarkable and a very sensible woman, who speaks of what she herself practices, wrote to me on this subject.

"How right you are, my Lord, to advise women to take their part in business, to learn to be serious, and even to study agriculture. I am an instance in point; for now that my sons are in the army, that I am separated from all my family, almost constantly alone with my husband, and always in the country, what would become of me, if my mother, from my infancy upward, had not given me the habit of interesting myself in every thing I saw and heard? Agriculture, with its hindrances and its progress, forms an inexhaustible source of conversation with my husband, with the priests, the village attorneys, the farmers, the country neighbors, the small town's people; a less exciting subject than politics, and which can be discussed with all of them according to their several capacities. My husband does not disdain to talk to me about manure, or alternation of crops; I have my theories about draining, beetroot, and colza, and he thinks me very *advanced*, perhaps too much so; nevertheless he never builds a

shed without consulting me; and before a lease is signed he always reads it over to me, two or three times over. I think it is very important for women and for their children that they should be initiated into business, and that they should know something about the employment of capital in the management of money; they ought not to *decide*, but to *listen and advise*. Most husbands like to talk over these matters openly, this subject being more interesting to them than any other. But in a general way they are not listened to, they are yawned at and not understood; so the husband becomes silent on the subject, takes the habit of managing alone, and following his own inclination, and there's an end. At the beginning of marriage, a young husband says every thing that a wife will condescend to listen to; later, he will think that she wishes to exercise some control over his affairs, and the more necessary her interference might be, the more wounded he would feel by it. Capacity, and some serious occupation, are necessary for women."

5. In one word, I wish women to be able to cultivate such and such an art or science, and even endeavor to attain rather an eminent proficiency in it, undisturbed in this very honorable pleasure without incurring the terrible anathema—and for the last time we will use this current and coarse expression—hurled against "blue-stockings." For, if there are women who, at the same time that they attend both seriously and thoroughly to the management of their house, raise themselves above purely material life by the love and the comprehension of the beautiful, endeavor to derive from it a refined enjoyment and pure emotions; who, in short, like to cultivate their mind, and are engrossed by all the interests of the good and the true, it is really odious to make this a matter of reproach.

6. I have also spoken elsewhere of the great use a woman would find in noting down from time to time and consecutively, as in a sort of private diary, her impressions and her reflections, at least on the important events of her life. But there is also another diary to be kept, besides this one, of the inner life of the soul, and the usually limited events of family life. A woman might keep a second journal, in which she might note down, not every day, (this would be too much,) but from time to time, some serious reflections or graver thoughts, a sort of journal in which she might write an analysis, or even a phrase of a discourse or of a conversation that had happened to strike her, an observation made on some journey or excursion, on some building, or in some gallery; and these are valuable recollections to fix, because they soon evaporate, and when they are thus fixed, they remain as a sort of triumphant acquisition for the mind. The habit is thus taken of intelligently seeing and listening, and of incorporating what one has seen and heard. As for "*the diary*," properly so-called, not written at all in a serious and Christian-like spirit, I own that this sort of diary would rather frighten me!

7. Above all, there is the study of religion. I have dilated very much on this subject in a former work: "*Letters to Men and Women of the World*," and I will only add one thing: It is above all in the higher classes, in which fortune authorizes what may be called the luxury of education, that religious instruction ought to be carried as far as the capabilities of a young man and woman will allow—doctrines, morality, the proofs of religion, the explanation of ceremonies, ecclesiastical history, works chosen from the early Fathers, great pulpit eloquence, lives of the saints, &c. &c. I have entered into detail about all this.

But above all, I should wish, that in the course of education, there should be an historical and progressive study on all that concerns religion. And besides, religious facts are intimately connected with the facts of modern history; a true idea of the latter can not be gained without a knowledge of the former.

A PLAN OF LIFE AND A METHODICAL ORDER.

Life is a serious thing, and it must not be given up to caprice or chance. Life is long, and during the succession of its years, and its diverse phases, it entails many duties; and together with these duties, heavy responsibilities. Life is sometimes hard to lead; we are not always young and smiling; trials, struggles, laborious exertions, crosses of all kinds, soon fall to our share, and they are the real essence of human existence, for amusement and pleasure are only its brilliant and deceiving surface.

Human life is complex, and it really includes three lives, each of which has its necessities, its labors, and its duties. There is the material life: it is lowest, but it must be thought of; then, in a higher region, there is intellectual life—woe to those who despise it; and finally, rising and towering above the two others, there is the spiritual life, for "man is not made for bread alone," but for eternity. There is the life of the body, the life of the mind, and the religious life of the soul.

The guidance and responsibilities of life assume gigantic proportions, when one begins to enter personally into existence, and assume control both of self, and of one other existence, and possibly of many other existences which are to arise from this God-ordained union. Have you thought of these duties and responsibilities? There are the conventional duties of society. There are the duties of your position—your special work. There is a house to be kept up, a fortune to be acquired, or to be attended to, and the current expenses to be balanced by your income. There is, if you wish to be somebody, and something, your individual life, your pursuits, your particular studies. There are also the claims of charity and of good works. And finally, as you have a soul, an immortal and a celestial destiny, there is, supposing you are Christians, the care of the soul, and your duties toward God. In short, duties and obligations of all kinds surround you. And no one has the right to tear asunder these united existences or to disregard their diverse and associated responsibilities, and they can not be regulated and discharged without reflection, forethought and plan.

It is beforehand, and from the beginning of their marriage, that the husband and wife ought to consult together about the plan of their future life, and this plan ought to be a wide and a serious one, which embraces the whole of existence. The duties of each, the profession and the position of the head of the family in his country; the children, their future and social relations; individual life; middle age, old age, and death; in one word, real existence, with its great features and its great phases: and it is to these great features, that all their actions, at the very first and from the earliest beginning, must be attuned in perfect harmony. In this way only, can a man show himself worthy of the authority and the dignity he has received from God. In this way only, can a woman make sure of the goodness and the unity of her life, and avoid the sad want of harmony that must arise in an existence which has never been subject to rule, between her youth and her old age.

Whilst, on the contrary, if life is well regulated, there can be a wonderful

agreement between the different ages that God has decreed that she shall pass through, and that she ought to be prepared to meet one after the other; shedding a charm and a general atmosphere of goodness around her.

It has even been observed among women whose lives have thus been spent in regularity and virtue, that when the fugitive beauty of youth is past, there remains a certain pure and superior beauty, which arises from the serenity and peace engendered in the mind by the happy harmony of their lives, and the constant and intelligent devotion to their duties. Then, as it happens to a well-built edifice, years pass over it; but far from their weight overwhelming it, they only add to its firmness and its beauty. And, if its rude breath sometimes carries away a delicate tracery, the building is not shaken, it is but touched by the storm, and the noble and beautiful harmony of its great features remains unscathed.

I do not pretend to say, that in the plan of life, however well it may have been laid out, one is able to foresee and to master all possible events; I only say, that a plan, and a plan alone, can introduce unity, harmony, and real beauty—which is the beauty of the whole—into a human existence.

The plan of life shows the aim to be attained, the methodical order gives the means of attaining it. The plan of life is the conception, the ideal, the theory: the methodical order is the daily and incessant practice of it. The first is the attainment of that supreme art which I should like to call the secret of life, that is to say, *the secret of conciliation*. In fact, do not duties, affections, and tastes often seem to contradict each other?

I know that a great deal of firmness, gentleness, and perseverance is necessary in order to gain one's liberty, to make one's hours of occupation respected, without neglecting at the same time any duty; in short, to give oneself up, and to keep oneself back at the right moment. It is a question of method and of order, like most questions of daily conduct. In order to have courage enough for this contest, women must be well convinced of its justice. But they are too much afraid of only consulting a taste, when, on the contrary, it is a *duty*, not to leave the powers of their mind uncultivated; yes, both a pleasant task and a duty.

Study makes women like their homes, where they are always called back by the love of some pursuit they have in hand. How little they then want the excitement of visiting and the whirl of the world! What a pleasure they find in getting back to their room, their books, and their drawing! How quickly and lightly they walk, in order to get home! And how a love for study occupies all the place in the heart and life, usually taken up by the unbridled and ruinous taste for dress and luxury! Another great art, that will be shown by a good method, is what I shall call, *the art of utilizing lost moments*.

They will get up,* but health will interfere; the husband will come in, and

* Let those who like to sleep longer than they ought, and have not the courage to accustom themselves to the easy effort necessary to make early rising so little an exertion. allow me to quote those beautiful verses of Dante. Dante had just sat down, being quite exhausted, and Virgil reanimates his failing courage by this vigorous exhortation:

"You must arise at once, Fame is not to be attained on a feathery couch:

"And he who does not spend his life in the pursuit of Fame, will leave no more trace upon earth than the smoke in the air or the foam on the wave:

"Then arise! conquer yourself by that force of mind which can conquer in every contest, if it does not allow itself to be overcome by the weighty body."

DANTE, *Inferno*, Canto 24.

talk over business, plans, &c.; the workmen, the children, small and great, will invade the room; a mother of a family has no hour to shut herself up, and to prevent any access to her.

How many women, and even girls, spend their lives under the yoke of these really tyrannical habits. And it is so much the more difficult to break through them, as they are called by the name of devotedness and family virtues. If you say to these girls, "crushed, flattened," according to M. de Maistre's expression, "by the enormous weight of nothing:" "Make an individual life for yourselves, withdraw for a few moments;" they answer—"But I can not. I haven't a minute I can call my own. If I leave the drawing-room, my room is invaded, there is 'just one word' to be said, and one has to stand for a quarter of an hour; and after that one sits down, another person comes in, and time is thus swallowed up; so that, notwithstanding all my patient efforts, I am unable to hide my annoyance sufficiently not to be considered as a rigid person and as a woman who is full of occupations"—a term synonymous with a blue-stocking!

Well, my answer to this is, that in the absence of regular hours, if there are really none at her disposal, let a woman devote her lost moments to study; there are always some in the best employed lives. One has at least, almost every day, disengaged moments several times in the course of the twenty-four hours; and a woman thus placed must accustom herself to study at odd times. When one knows how to profit by the least portions of time, one works wonders. The Chancellor d'Agnesseau used to say, "These are the volumes I have written during the five minutes of each day for the last twenty years, that Madame d'Agnesseau has been too late for dinner."

The women who are the most cheerful, the most even-tempered, the most ready to do a service, and I will add, the most healthy, are intelligent and industrious women, who have found in a methodical activity the secret of never losing a moment, and of thus conciliating their duties towards God, towards their families, towards the world, and towards themselves.

It is impossible for a woman—no less than for a man—to do any thing really serious, if she goes into the world every day, and keeps late hours at night and gets up late in the morning. It is the death of intellectual life; too many hours are given to the world in the evening, and to visits paid or received in the day-time. And what is most favorable to intellectual pursuits in a methodical arrangement of the day, is to devote the morning hours to them. I can quote here a great example, that of the illustrious Madame Swetchine, and I find in her life the following passage: "Madame Swetchine had strongly exhorted me to reserve myself, at all times, some hours of entire liberty every morning. 'Time is different,' she used to say, 'in the morning, to what it is at any other hour of the day.' And it was not only in order to consecrate to God the first hours of the day, that she began it so early, but also to have a considerable time to devote to study. She told me, that the pleasure she derived from study only increased with her years. 'It has reached such a point,' she added, 'that when I approach my table, in order to set to my beloved occupations, my heart beats with joy.'"

I will just add the following advice to that given by Madame Swetchine: "Examine, set in order, and resolve upon your morrow's work; the evening before, arrange the matters in hand relatively to their importance, and act accordingly. You will thus learn the secret quickly of finding time for study and for every thing else."

ELEMENTARY SCHOOLS AND TEACHERS' SEMINARIES IN PRUSSIA.

BY HENRY E. DWIGHT.

TRAVELS IN NORTH OF GERMANY IN 1825-26.

LETTER XV.—*Common Schools—Seminaries for the Education of School-masters—Importance of introducing them into the United States.*

BERLIN, 1826.

THE elementary schools of Prussia are entirely under the direction of the government. No one is allowed to act as an instructor in them, without a previous examination, and a written permission from the committee of examination. At the present time there are more than twenty thousand of these schools in the kingdom, of which seventeen thousand are in the villages, and the remainder in the towns. For the preparatory education of these instructors, one or more seminaries are established in every province, and are supported by the government. The object in forming these institutions was to introduce a uniform system of instruction throughout the kingdom, as well as to prevent any person who was not qualified, from attempting to teach the peasantry. To these seminaries all those who wish to become instructors in the elementary schools are required to repair, where they are taught every thing necessary for their future station. Here they remain from two to three years, the time being regulated by their capacity, and their qualifications at the period when they commenced their course. They study, at these seminaries, geography, arithmetic, the German language, and the Bible. Here also they are taught the best modes of educating, and of governing children, as well as the subjects they are to teach. After they have finished their course at the seminaries, they are examined, and if found qualified, they receive a certificate to this effect. This paper, with a certificate of their baptism and moral character, which is signed by the pastor of the church they formerly attended, is presented to the government, or to its agents, who immediately enter their names on the list of instructors. By the

* HENRY E. DWIGHT, the author of "Travels in the North of Germany in 1825-26," published in 1829 in New York, was a son of Dr. Dwight, President of Yale College, in which institution he received the best culture of the period in this country. Having spent several years abroad, including two in Germany, where he was particularly interested in the educational institutions of Prussia, he returned to New Haven, and in connection with his brother, Rev. Bereno Dwight, D. D., established the New Haven Gymnasium, avowedly on the plan of the German Gymnasium. It started with the brightest prospects, which were suddenly darkened by the death of its projector in 1832.

To these "Travels," and to the interesting conversations of Prof. Dwight, and to the "Letters from Silesia" by John Quincy Adams, the author of this book on Normal Schools owes his first knowledge of and interest in the School System, and Teachers' Seminaries of Prussia.

establishment of these institutions, a uniform mode of instruction has been introduced throughout Prussia.

The population of the United States is generally so intelligent, that many of the instructors of our elementary schools are sufficiently well informed to teach the rudiments of education. There is, however, with us no systematic mode of instruction; and, in many instances, there is a great ignorance of the best mode of communicating knowledge to the minds of children. To understand a subject, will not of itself enable one to impart a clear view of it to others. This capacity can only be acquired by previous preparation, or by long experience. Few even of those who have been in the habit of instructing children for years, have that intimate and extensive knowledge of the subjects they teach, which is necessary for an instructor, whose object is to expand the mind of the child, and to excite his enthusiasm. Emulation doubtless exists to some extent in our schools, but it results principally from the desire of receiving marks of approbation, and from the little presents which are distributed to the youth. This, unquestionably, exerts somewhat of an auspicious influence, but it ceases as soon as the child leaves his school.

The great object of all instruction is *to excite a thirst for knowledge*, one which neither time nor distance can extinguish. It is not enough to impress certain facts on his mind, such, for instance, as are found in all our geographies, relative to the form, population, extent, &c., of the different countries of the world; there should be a constant endeavor to excite that curiosity which will prompt him to make subsequent inquiries for himself, to procure an amount of knowledge concerning the commerce, statistics, power, and comparative resources of nations, from which he will be always able to derive a fund of thoughts and arguments. He should be made a thinking, reflecting being; one who can discern the shadow, and not mistake it for the reality; one who can judge correctly on the great concerns of life, and who is not governed by others. The great difference between the Southern peasantry of Europe and our farmers is this, the one class are a mere machine, the other are a reflecting people. But, although the latter class are intelligent, they are below that point to which they might easily be elevated, were our common schools to assume the high character they would soon exhibit, if they were intrusted only to men of superior intelligence.

It is as necessary to educate an individual who designs to instruct others, as to educate a professor for his chair, or a general or commodore for military or naval command. Without such preparation, the instructor will be almost as unqualified to communicate knowledge, as a corporal would be to lead a division into action. In many of our States, we have large funds, the interest of which is appropriated to the maintenance of elementary schools. In Connecticut, this fund will soon be more than sufficient to provide the necessary means of instruction for all the youth of the State. Were the surplus to be applied to the support of a Seminary for the education of schoolmasters, the happiest results would soon

be perceived. In such an institution, the young men would not only learn every thing connected with the usual subjects taught in our elementary schools, but might easily acquire that knowledge of theoretical agriculture, mineralogy, botany, statistics, and political economy, which would enable them greatly to enlarge the boundaries of knowledge in the villages where they reside. Persons thus instructed would easily become the prominent men of the villages where they resided. They would be enabled to direct the minds of not a small number of the villagers, as well as of their pupils, to subjects which would otherwise never have arrested their attention.

Were such schoolmasters provided for the education of the youth of Connecticut, the intellectual character of the mass of the inhabitants would, in one generation, not only become superior to that of every other people, but it would become the wonder and admiration of our country. To support such a Seminary,* and to provide it with the necessary *material* of literature, would not cost more than ten thousand dollars annually. Is it not desirable, at least, to try the experiment? How can we, for so limited a sum, accomplish an equal amount of good? Are not the minds and character of the rising generation worth this trifling expenditure? Shall we always walk in the beaten track of our fathers, when prospects so bright and so glorious are opening to our view?

By the improvement of our common schools, those of a higher character would soon improve, and resemble, at least in some degree, the classical schools in Europe. This advancement would exert a most auspicious influence on the colleges of our State, and the inhabitants would acquire a character superior to those of any province in the civilized world. Connecticut is too small in territory to exert much influence in our national councils. Many of the small states of Germany are almost invisible, when glancing your eye at the map of Europe, and like them, Connecticut is barely seen in a general survey of the map of the United States. Like them, however, Connecticut may rise to an intellectual elevation which shall excite the envy of those great States which now surpass her so much in population and resources. There is no other way for her to exert an influence over the Union. If she does not pursue this course, if she does not maintain her comparative literary eminence, she will soon cease to attract attention, and she will, ere long, be unobserved, unless to contrast the spirit of her children with that love of excelling for which their fathers were so much distinguished.† On the other hand, if she

* In the University of Leipzig, and perhaps of some others of Germany, lectures are delivered on education, in which the professor gives a historical view of the state of education in ancient and modern times, and examines all the important systems that have been formed upon this subject. In such a seminary as I have proposed, lectures of this kind, as well as those above referred to, should be given, and after a residence there of three or four years, young men would be qualified to instruct the great mass of the people in such a manner as to elevate the next generation far above the station filled by their fathers. Young men thus educated would be certain of success, and by them every important vacancy would be filled.

† Our ancestors, not only when New England was settled, but down to the beginning of the last century, felt an ardent desire to provide the means of education for their children. They were poor, we are comparatively rich: they were exposed to great hardships; we are enjoying lives of tranquillity. Let us, with our superior advantages, manifest an equal interest for those who are to succeed us, that they did for us.

greatly enlarges the means of education for the mass of her people, and if her classical schools and colleges are placed on a broad and noble foundation, she will, in less than a century, acquire that elevation of character which will make her sons glory in their birthplace, and to be able to say, "I am a citizen of Connecticut," will be to them a source of as much pride as an Athenian ever felt in the age of Pericles, when looking at the city of Minerva.

Every clergyman in Prussia is required to visit the school or schools of his parish, and to ascertain whether the teacher fulfills his duties. He must confer with him often, must point out any defects which may exist in his mode of discipline or instruction, and see generally that he adopts the course which will best promote the interests of the school. Should the instructor not approve of the plans proposed, the question is referred to the superintendent of the district, who decides, and from whose decision there is no appeal. The clergyman of each parish makes an annual report to this officer, and the general report of the latter is sent to the Minister of Public Instruction once a year. A committee, consisting of one or more inspectors appointed by government, with the superintendent, or some person whom he may appoint, examine all the schools within their district, once or twice a year, to ascertain whether the reports made by the clergy are correct, as well as to form a general view of the state of education in their provinces. The existing defects and the necessary improvements are thus made known to the government, and such alterations are then made as are requisite.

The instructors are required to confine themselves almost exclusively to their professions, and not to pursue any one which will interfere with their business of instruction. Other pursuits are allowed in those cases only in which the receipts of the school do not furnish a subsistence. The duties of the teacher are numerous, as he is not only an instructor of youth, but is also a servant of the Church. In the former capacity he must attend to the education of his pupils in the common branches of instruction, and also in Biblical knowledge. Every morning and afternoon he is required to open the school with singing and prayer, and to close it with singing a hymn, in which such of his pupils as are capable unite. In the school, he is never to appear in dishabille, but as the ordinance of December 24, 1820, decrees, he must "never be without a cravat, nor wear slippers" before his pupils, as he would thus lose much of his influence. It is also enacted, that he shall never smoke in the school-room; for so universal is this custom, that nothing but a royal ordinance could prevent it. In his capacity as a servant of the Church, he officiates as chorister; for Germany is a nation of singers, and in those village churches where there is an organ, it is his duty to play upon it. During the sickness or absence of the clergyman, he is required to officiate as his substitute; to read such a sermon as the preacher has previously selected, and afterwards to catechise the children. In the church, he must always appear in black, and when the pastor is present, must take charge of his scholars. In every situation he is required to yield

precedence to the clergyman. Without the permission of the latter he can not be absent from the school; and with such permission, no longer period than three days. Should he desire a longer absence, it is necessary to apply to the superintendent, without whose approbation no alterations in the prescribed mode of teaching are allowed.

Every parent is required to send his children to school as soon as they have reached a certain age, which, if I mistake not, is six years. It is the duty of the clergyman to visit his people annually, to ascertain if there are any parents who do not comply with this regulation. Should such parents, after having been notified by him, refuse to send their children, they are arraigned before a public tribunal, where they are punished by a fine. For the first week's absence of each child, the fine is one-thirtieth part of a rix dollar; for the second, one-fourth; for the third, two-thirds; and for the fourth, a rix dollar. Should he still continue to refuse to send his child, he is compelled to pay thirty fold. This penalty is imposed between the first of October and the first of April. From the first of April to the first of July, the child is not required to attend school but half the time; and after the last mentioned period, until the first of October, parents are not required to send their children, as they need their assistance during the harvest months. The children must remain at school until they are confirmed, which usually takes place at fifteen years of age, though it is sometimes delayed by the parents until sixteen.

The school-house is erected at the expense of the parish, and must be sufficiently large to accommodate the scholars and the family of the instructor, who receives the use of it gratis. In the vicinity of this edifice is a small garden, and sometimes a few acres of land; of which he has the use so long as he remains the instructor of the parish. This building is not very elegant, as it usually contains but four or five chambers, but it is suitable for one whose income is so moderate as that of most of the instructors. Every parish has a treasury, from the funds of which the instructor is paid from seventy to eighty dollars per annum. Besides this amount, each parent pays to him six *pfennings* a week, or about six cents per month, for the instruction of each of his children. In some cases he receives also a small quantity of butter and flax from the parents. His whole income, exclusive of the rent of the school-house and the ground connected with it, rarely amounts to more than one hundred Spanish dollars, if he teaches one of the village schools. Those who live in the towns receive about one hundred and fifty dollars.

All the books which are studied are selected by the consistory, and no new one can be introduced without its permission. The Bible is universally read by the children, and forms, as in our own country, the foundation of education for the youth of Prussia.

From this statement you will perceive how much this government has done for the people. In no country in Europe, except Saxony and the south of Scotland, and possibly in one or two of the smaller states of Germany, is education so universally diffused as in the central part of this kingdom. These schools are established in every village. It may

be said with truth of Prussia, that it is one of the most enlightened countries in the world; for among the younger class of the population, it is rare, to see an individual who can not both read and write. I make use of the word younger, because many of the laws relating to education were enacted during the reign of the present monarch, before whose accession the schools were in a much lower state than at present. No one can help respecting Frederick William for the wisdom he has exhibited, in thus improving the character of his subjects. This emotion will be stronger, when it is recollected that he is one of the most active members of the Holy Alliance, and that he is still not afraid of the general diffusion of intelligence among his subjects. He is here laying a broad foundation for the future prosperity of Prussia, and it is to be hoped also, for the future liberty of the nation. This event will not probably happen in many years, but it must come, should these institutions continue for a century.

Although there are some defects in the plan which Frederick William has formed to diffuse intelligence throughout his dominions, the system is still so much superior to those of most Protestant countries, that you will perhaps feel no little surprise at this account of it; accustomed as we have been only a few years since, to class the Prussian peasantry below even those of England. Perhaps the greatest defect in the schools of Prussia is the allowance of so limited a compensation to the instructors. In a country like ours, this evil need not exist; but in Prussia it is unavoidable, so long as it continues as poor a kingdom as it is at present. The price of produce is now so low, and the difficulties of finding a market are so great, that it is extremely inconvenient for many of the peasantry to pay even the small sum which the law requires for the education of their children.

Allusion has been already made to the great benefit that might be derived from the establishment of seminaries for the education of instructors. There is another advantage which would flow from such institutions. In the United States the business of instruction is, to a great extent, a secondary employment. It is one which occupies most teachers but a limited part of their lives. The young men who are thus employed, find in the almost immeasurable West a larger scope for their talents; while the young ladies and young widows, to whom the education of most children is committed, soon discover that matrimony is a much more desirable state, than the "delightful task of teaching the young idea how to shoot." Instructors in Prussia have no other employment. This is the great object of their existence; here is their permanent home. Were such seminaries established with us, by increasing the compensation of the instructors we might easily persuade them to make it the employment of their lives. It would then soon become a distinct profession, and many young men of respectable talents and acquirements would look to it as a future occupation. Instead of being compelled to exchange the instructors of our children so frequently, the schools would be reorganized, and the teachers would rarely think of pursuing any other profession.

PETITION IN BEHALF OF ELEMENTARY SCHOOL TEACHERS' SEMINARIES.*

To the Hon. Senate and House of Representatives of the State of Massachusetts.

THE Convention assembled at Halifax, in Plymouth county, this 24th day of January, 1837, composed of delegates equally chosen from eighteen towns in said county, and the towns of Cohasset, Weymouth and Braintree, in Norfolk, beg leave to address you, as petitioners, praying for your patronage of elementary education throughout the State.

We cheerfully and gratefully acknowledge that our town schools have shed inestimable blessings on successive generations; and we appreciate that wise and Christian foresight in our pilgrim fathers which moved them, thus early, to provide for the instruction of their children. We would follow their noble example; and, like them, looking forward to the new and unknown trials of the future, would furnish the rising generation with those qualities of heart and of head which will enable them to turn to the best account whatever changes time may bring to our Republic or the world.

From the most authentic documents, and from personal inspection, we have come to this conclusion, viz., that the town schools of Massachusetts are not so good and useful as they ought to be, and as they can be. We believe they are behind the age, both in the topics of study and the modes of teaching, and consequently are behind the imperious wants of our growing community.

This conclusion summons us at once to high and patriotic duties. It calls upon us to ask if there be any system of public instruction known in the world which educates the young mind more readily and fully than ours?

To this all-important query, we emphatically answer yes; and we answer understandingly, with the living proofs thereof before the world. From documents, public and private, which no man can doubt, and from the personal observation of some of us, we believe that the system of public instruction pursued in the kingdom of Prussia will develop far more rapidly and completely than our own, *all* the physical, intellectual and moral powers of youth. In proof of this statement, we refer to those foreigners who have lived in that country, and who have given their public testimony on this point. But we particularly refer to the "Report on the state of public instruction in Prussia, addressed to the minister of public instruction at Paris, by Victor Cousin, a peer of France, professor of philosophy, &c.," a man who has devoted years to this subject, who has visited all Europe on errands of education, and who was sent to Prussia by his government, on purpose to inspect every institution connected with learning and youth. Returning to Paris, he says: "I left Prussia with a mind full of respect for a country in which the education of the people had reached such a pitch of prosperity." And again he says: "There does not exist a single human being throughout Prussia who does not receive an education sufficient for all the moral and intellectual wants of the laboring classes."

Now we have just learned that in the United States there are more than a million of children who can not read or write. The king of Prussia and our republic seem now to be placed side by side, in their patronage of elementary education. Shall we see the monarchy bear off the palm from the republic?

It would be gratifying to us, dared we so intrude upon your patience, to give an expose of the whole school establishment of that kingdom, with all the regal statutes and by-laws, as well as the topics of study in these schools, and the modes of pursuing them. All these we omit: but will you allow us, in passing, to say that besides the studies pursued by our children in our town schools, the children there, of the same age, are successfully instructed in singing, drawing, the arts of agriculture and gardening, the sciences which pertain to mechanics and manufactures,—natural history, cosmology, composition, forensic discussion, foreign languages, the nature of civil government; their duties as voters, trustees, administrators, jurors and public officers; also, the common duties of life, and especially the nature of man, physical and moral, his specific duties to himself, to his fellow men, and to his God. Their prin-

* The earnestness and ability with which the Rev. Charles Brooks advocated the Prussian System, and especially the Normal School feature, is exhibited in the following Petition (drafted by him) from a Convention of Delegates from the towns of Plymouth and Norfolk counties.

ciple seems to be this, that every thing which it is desirable to have in the national character should be carefully inculcated in elementary education.

We think the object of education is to develop ALL the powers, faculties, and affections of human nature in their natural order, proper time and due proportion; so that each one may occupy the exact place in the grown-up character which God at first ordained in the infant constitution. Education we take to be the natural continuation of the process of creation, taking up that process just where the Deity left it. He who has but half the powers which God has bestowed on him, developed and in action, is just half as useful and half as happy as he might have been. The Prussian system, better than any with which we are acquainted, aims at unfolding the *whole* nature of man, as the Creator designed; thus bringing out *all* the talent of the country, and thereby giving to every child the chance of making the most of himself. Long and successful experience has established the principle among them that the most safe and complete culture of the intellect must be accompanied by the culture of the moral powers. The Prussian system, therefore, is emphatically a *Christian* system. "Love God: love man; do to others as you would that others should do to you;"—these are the basis of all their instruction. Nothing is so strongly insisted on by Cousin, as the making of Christianity the foundation of all human culture and national civilization. He says on this point, "Religion is an indestructible power, and genuine Christianity a means of civilization to the people. Popular education ought, therefore, to be religious; that is to say, Christian; for I repeat it, there is no such thing as religion in general:—in Europe, and in our day, religion means Christianity. Let our popular schools, then, be Christian; let them be so entirely and earnestly." Again he says, "I know something of Europe, and never have I seen good schools where the spirit of Christian love was wanting."

The character of Massachusetts is yet unstained. To preserve it pure and powerful, we believe that moral education must be introduced into our elementary schools. To future generations we think it must be the grand preserving principle of national prosperity and political union. Think what New England has to do. It must be her true-hearted Christian faith, her well-balanced character, that shall enable her to sustain her premises. Her talents and virtues have lifted her high above many others; and we are desirous that her example of advancing knowledge and increasing excellence should still keep her name there, a beacon-fire to the nation, a hope to humanity.

To secure these glorious results, we think that we may imitate the Prussians, not only in more varied and extensive studies, but also in their Governmental Organization. We accordingly recommend the following, which is about half as complicated as theirs, viz:

1. There should be a school committee in every town, who should have full power to superintend and regulate all the schools within their town; and who should also be legally empowered to secure the constant and punctual attendance of all those children who, but for them, would grow up in ignorance. It should be the duty of every such board to report annually to the secretary of public instruction at Boston.

2. There should be a "Board of Education" in every county, composed of the chairmen of the several "school committees" in the towns of said county. They should be allowed to visit any schools in the county whenever they desired; thus connecting all the schools of a county together by a common ambition; and, moreover, enabling any town to profit immediately by whatever improvements had been suggested by any other town. This board of education should superintend and regulate the teachers' seminary established within their county; and be required to gather all the information they could that might advance useful knowledge and sound morals in elementary instruction. They should annually report to the secretary of public instruction.

3. There should be a "secretary of public instruction," whose duty it should be to superintend and regulate all the general interests of the school-system; to see that proper books were prepared; to correspond with other States and foreign countries, to exercise a paternal care, and to recommend the new studies and modes which he may deem important. He should report annually to the Legislature, and to them should be severely responsible.

If he needed particular advice and aid at any time, he should be allowed to call upon the chairmen of the several "Boards of Education" through the State, and they "ex officio" should constitute his council.

Thus arranged there would be secured to all our schools the constant superintendence of local powers, and the guidance of a superior hand, vivifying and harmonizing the whole. The details should be left to the local powers, on the true republican principle, while the general impulse is given by the advice and suggestions of the chief officer.

Such an organization we think would pour the breath of life into our school-system. It must have this extent to secure the results attained in other countries. If any object in the State needs minute and wise attention, it is the instruction of all our children.

But your petitioners are willing to resign these and all the other external arrangements above noticed, if you will hear our prayer for one provision, which we now deem of paramount importance,—we mean, the establishment of a "seminary for the preparation of teachers." Over and over again have the Prussians proved that elementary education can not be fully attained without purposely-prepared teachers. They deem these seminaries of priceless value; and declare them, in all their reports and laws, to be the fountains of all their success. Out of this fact in their history has arisen the maxim, "As is the master so is the school." We are certain that philosophy and experience alike verify this maxim in Massachusetts. We have no wish to say aught against our schoolmasters or mistresses. They are as good as circumstances encourage them to be; as good as the community have demanded; but we are confident that teachers thoroughly prepared, as they are in Prussia, would put a new face on elementary education, and produce through our State an era of light and of love. We hold the following proposition to be true, viz., the extent of a child's comprehension is the true measure of culture required. Is so much culture imparted? We fear that not more than one half of what they can profitably receive and understand is actually taught to our children; and this defective system will continue until we have teachers who comprehend what a complete education means, and who know how to impart it, in its fullness and purity, to the hungry and inquisitive mind of childhood.

Did we presume to trespass further on your patience, we think we could demonstrate that our present system (besides being behind the advanced state of the world) is far more expensive than the improved one we ask at your hands;—and we should demonstrate it on this principle, viz., that an ingenious and faithful workman is cheapest, though we give him higher wages. An uneducated and inefficient master will keep his school down to his own level; for no streams flow higher than their fountain. We deem it, therefore, the first of all favors which you can grant to your constituents, to secure to every county a "seminary for the preparation of teachers." By such an act you will make this a most memorable year in our calendar; you will secure the warm and unanimous thanks of each generation, as it rises to act and suffer the allotments of humanity; you will bring into active good service all the talent of the State; you will meet the wants of the times, and enable our children to sustain the exalted character of Massachusetts, although there be so much imported ignorance and vice to dim her glory.

We feel bound to sustain our recommendation of "teachers' seminaries," by quoting a few words from Cousin. There are forty-two such seminaries in the kingdom of Prussia; and, speaking of their rapid establishment in France, Cousin says, "That in some of the departments (i. e. counties in France) they have shown prodigality rather than parsimony in establishing seminaries for teachers." And he then adds, "France almost universally agrees to the indispensable value of these seminaries." The Prussian statute on this subject is this: "To provide schools with suitable masters, the care of their training should not be left to chance. The expenses shall be defrayed by government. The schoolmaster, to be worthy of his vocation, must be religious, discreet, deeply impressed with the dignity and sacredness of his calling. He should be thoroughly acquainted with all his duties, and should possess the art of communicating knowledge, and the power of government." Cousin, after having given this subject the most profound attention for years, with the purpose

of introducing some new and better modes of popular instruction into France, comes to this conclusion, viz.: "The best plans of instruction can not be executed, except by the instrumentality of good teachers; and the State has done nothing for popular education, if it does not watch that those who devote themselves to teaching be well prepared." On this opinion we rely; believing it to be the sober conviction of the best judge now living on the earth. Again he says: "It must be laid down as a principle that every 'department' (or county) in France *must* have such a seminary;" "and it rests with you, sir, (addressing the secretary of public instruction) to have, in a few months, eighty-four such seminaries;"—and with *you*, gentlemen of the Senate and House of Representatives of Massachusetts, with you it now rests whether every county in the State shall or shall not have such a blessing within it to all future time.

The measure is recommended to you by the well-tested experience of an intelligent nation: by the ready adoption of it in neighboring realms; by the wide and benignant effects which it has every where produced; by a large number of your own constituents, yet, most of all, by its own inherent reasonableness and its perfect practicability.

There have been nine or ten large public meetings, embracing towns and counties, and in every one of them the wish for teachers' seminaries has been foremost. Light has come to us, and we can no longer be content with darkness. The spirit of inquiry and improvement is abroad, and we think Massachusetts ought to be the first in making an exemplary use of it.

There is at this time a very peculiar concurrence of circumstances. There are modes of elementary instruction well proved to be superior to our own, just made known extensively in the United States; and at the same moment a surplus revenue, unappropriated, which enables you, by a single word, to adopt and perpetuate these improvements in every village and city of our State. If this opportunity passes, we shall look for another in vain. We do therefore most urgently beg your honorable bodies that you will specially appropriate so much of the surplus revenue as may be sufficient to found and support seminaries, which shall supply competent teachers for all our common schools. If said revenue be given to the towns, we ask that you will make it a condition of such grant that the towns in each county shall establish and support, within their county, a seminary for the preparation of teachers:—or at least that the bill now before your honorable bodies be so amended as to grant to the respective towns of the Commonwealth the power of appropriating such portion of their share of the said fund as they may deem proper, to the advancement of education, in such mode as shall seem to them best fitted to secure that object; or, if said bill shall have become a law before the reception of this petition, we respectfully ask that an act be passed granting to the towns the requisite power.

And now, gentlemen of the Senate and House of Representatives, standing as we do on the Rock of Plymouth, we appeal to you as members of the social state, as citizens of a free republic, as descendants of the pious pilgrims, as lovers of sound learning, and as the chosen guardians of the public morals; in short as parents, as patriots and as Christians, we appeal to you, earnestly entreating that you will not let this most favorable opportunity pass without securing to all future generations the inestimable benefits of competent instructors.

But if our prayer thus far shall not be granted, we ask for the means of commencing this glorious work in the Old Colony, and therefore pray that a Teacher's Seminary, upon the principles set forth in this petition, or upon such as the Legislature may deem proper, may be immediately established in the county of Plymouth.

So deeply impressed are we that purposely-prepared teachers are indispensable to the full and requisite instruction of our youth, that we can not but think that the great majority of your constituents would feel as we do, after having attained all the information which is but alluded to in this petition; if, therefore, your honorable bodies may not think it best to grant any of the above requests, we pray that you would defer making an appropriation of the surplus revenue until a more deliberate expression of public opinion can be obtained.

THOMAS P. BEAL, President.

JOHN A. SHAW, }
THO'S. P. RIDER, } Secretaries.

IV. INSTITUTIONS FOR THE PROFESSIONAL TRAINING

OF TEACHERS IN THE UNITED STATES.

PREFATORY NOTE.

In the following article we shall close the series of papers, in which we have attempted to make contributions to the historical development of Normal Schools, or Teachers' Seminaries, in this country, by an account of the principal institutions which have been established and are now in operation in the several States, for the professional training of teachers for public schools. This article was drawn up mainly by Prof. David N. Camp, late Principal of the State Normal School in New Britain, Connecticut, for No. XII of the Monthly Circular issued by the Commissioner of Education at Washington, and published with the Documents referred to in the Report of the Department for 1868.

The previous articles and documents on the subject can be consulted by reference to the Classified Index, Chapter IV, which, for convenience of the reader, we introduce in this connection.

To the account of the State Normal School of Rhode Island, published in Number 26, (Volume XI, page 281-8,) we give a few facts of its subsequent history, as well as continuation of the history of the Connecticut State Normal School, (Volume X, p. 15-58,) by announcing in this place that the Legislature in 1868 decided to re-open the School in 1869.

To the documentary history of Normal Schools in Massachusetts given in Number 42, (Vol. XVI, p. 75-104,) we add the latest general Regulations adopted by the Board of Education for their government, together with a special notice of each institution. In addition to the State Normal Schools at Albany and Oswego, the Legislature has appropriated \$48,000 a year towards the expenses of instruction in four more schools; provided, that the towns where the same shall be located shall provide suitable building and equipment; which has been done by Potsdam, Cortland, Brockport, and Fredonia.

It is our intention to re-issue these various articles in a volume, as a new edition of the original treatise, entitled "*Normal Schools, and other Institutions, Agencies and Means designed for the Professional Education of Teachers*,"—first published in 1850.

CLASSIFIED INDEX OF BARNARD'S AMERICAN JOURNAL OF EDUCATION.

IV. TEACHERS; NORMAL AND MODEL SCHOOLS; TEACHERS' INSTITUTES.

- The School and the Teacher in English Literature, **III**, 155, 449; **IV**, 183; **VIII**, 983; **XVI**, 432.
- Legal Recognition of Teaching as a Profession; Memorial, **X**, 397-398.
- The Teacher as an Artist, by Z. Richards, **XIV**, 69.
- The Teacher's Motives, by Horace Mann, **XIV**, 277.
- Essentials to Success in Teaching, **I**, 561.
- Letters to a Young Teacher, by G. F. Thayer, **I**, 357; **II**, 103, 391, 657; **III**, 71, 313; **IV**, 219, 450; **VI**, 435; **VIII**, 81.
- Lectures to Young Teachers; Intellectual Education, by W. Russell, **II**, 113, 317; **III**, 47, 321; **IV**, 199, 309. Moral Education, **IX**, 19.
- Special Training a Pre-requisite to Teaching, by H. Mann, **XIII**, 507.
- Teachers and their Education, by W. E. Channing, **XII**, 453.
- Professional Training of Teachers, **XIII**, 269.
- Didactics as a Department in Colleges, by T. Hill, **XV**, 177.
- German Views upon Female Teachers, **IV**, 795.
- Teachers' Conferences and other Modes of Professional Improvement, **XIII**, 973.
- Teachers' Institutes in Wisconsin, **VIII**, 673. In Different States—Historical Development, **XV**, 367. Connecticut, 387; New York, 395; Ohio, 401; Rhode Island, 405; Massachusetts, 412.
- School for Teachers, by W. R. Johnson, **V**, 799.
- Teachers' Seminaries, by C. E. Stowe, **XV**, 688.
- Relation of Normal Schools to other Institutions, by W. F. Phelps, **III**, 417.
- Historical Development of Normal Schools in Europe and America, **XIII**, 753-770.
- Germany and other European States—Number, Location and Results of Normal Schools, **VIII**, 360; Professional Training of Teachers in Anhalt, **XV**, 345; Austria, **XVI**, 345; Baden, **X**, 212; Bavaria, **VI**, 289; Belgium, **VIII**, 503; Brunswick, **XV**, 453; France, **XIII**, 281; Greece, **XII**, 579; Hanover, **XV**, 419; Hesse-Cassel, **XV**, 439; Hesse Darmstadt, **XIV**, 416; Holland, **XIV**, 501, 647; Lippe Detmold, **XV**, 475; Mecklenburg, **XV**, 464, 479; Nassau, **II**, 444; Prussia, **XI**, 165; Russia, **XII**, 797; Sardinia, **III**, 517; Saxony, **V**, 353; Switzerland, **XIII**, 313.
- Great Britain. Training Colleges in England and Wales, **X**, 349. Normal Schools of the British and Foreign School Society, **X**, 435. Normal and Model Schools of the Home and Colonial Society, **IX**, 449. St. Mark's Training College for Masters of the National Society, **X**, 531. Battersea Training School for Parochial Schoolmasters, **IX**, 170. Chester Diocesan Training College, **X**, 553. Normal Schools for Training Schoolmistresses, **X**, 571; Normal Schools at Edinburgh and Glasgow, **X**, 583. Irish System of Training Teachers, **XI**, 136.
- France. Normal Schools and Training, **XIII**, 281. Normal Schools of the Christian Brothers, **III**, 437.
- Holland. Normal School at Haarlem, **XIV**, 501.
- Prussia. Provisions for Education and Support of Teachers, **XI**, 165-190. System of Normal Schools, **XIV**, 191-240. Seminary School at Weissenfels, **VIII**, 455; **XIV**, 219. Dr. Julius oo, **XVI**, 89. Regulations of 1854, **XVI**, 395.
- Normal Schools in Switzerland, **XIII**, 313-440.
- Normal and Model Schools of Upper Canada, **XIV**, 483.
- United States—Documentary History of Normal Schools—Adams, **I**, 589; Bache, **VIII**, 360; Barnard, **X**, 24, 40; Bates, **XVI**, 453; Brooks, **I**, 387; Barrowes, **XVI**, 195; Calhoun, **XVI**, 80; Carter, **XVI**, 77; Channing, **XII**, 453; Clinton, **XIII**, 341; Dwight, **IV**, 16; Edwards, **XVI**, 271; Emerson, **XVI**, 93; Everett, **XIII**, 758; Gallaudet, **X**, 16; Hall, **V**, 386; **XVI**, 75; Humphrey, **XII**, 655; Julius, **XVI**, 89; Johnson, **V**, 798; Linsley, **VII**, 35; Mann, **V**, 646; **VIII**, 360; Olmsted, **V**, 369; Peirce, **IV**, 305; Phelps, **III**, 417; Putnam, **I**, 566; Sears, **XVI**, 471; Stephens, **VIII**, 368; Stowe, **XV**, 688; Tillinghast, **I**, 67; Webster, **I**, 590; Wickersham, **XV**, 221.
- Chapter in the History of Normal Schools in New England; Charles Brooks, **I**, 587.
- California. State Normal School, **XVI**, 628.
- Connecticut. History of State Normal School, **X**, 15-58. History of Teachers' Institutes, **XV**, 367.
- Illinois. State Normal University at Bloomington, **IV**, 774.
- Kentucky. State Normal School, **III**, 217.
- Maine. State Normal School, **XVII**.
- Maryland. State Normal School, **XVII**.
- Massachusetts. State Normal School at Bridgewater, **V**, 646; **XVI**, 525. At Barre; Everett's Address, **XIII**, 758. At Westfield, **XII**, 652. Teachers' Seminary at Andover, **V**, 386. History of Teachers' Institutes, **XV**, 367.
- New Jersey. State Normal School, **III**, 221. Its Alma, by D. Cole, **V**, 835. Farnum Preparatory School, **III**, 397.
- New York. State Normal School at Albany, **XIII**, 341, 531. History of Teachers' Institutes, **XV**, 365. Training School at Oswego, **XVI**, 230. Normal School at Brockport, **XVII**.
- Ohio. History of Teachers' Institutes, **XV**, 401. Normal Schools in, **XVII**.
- Pennsylvania. Professional Training of Teachers, **XIV**, 721. Normal School at Millersville, **XV**, 221. Philadelphia Normal School for Female Teachers, **XIV**, 737. **XVI**, 195. Normal School at Mansfield, **XVII**.
- Rhode Island. Education of Teachers, **XI**, 222. History of Teachers' Institutes, **XV**, 405.
- Vermont. Teachers' Seminary in 1823, **XVI**, 146. State Normal Schools, **XVII**.
- Wisconsin. Teachers' Institutes, **VIII**, 673. Normal Schools, **XVII**.

TABLE II.—*State Normal Schools—1867.*

Location.	Established.	Opened.	Students.			State appropriation, 1867.
			Graduates.	Total	1867.	
MASSACHUSETTS.						
Framingham	1839	1839	1, 148	1, 573	158	\$8, 500
Bridgewater	1839	1840	975	1, 542	100	8, 500
Westfield	1839	1839	412	1, 862	164	8, 500
Salem	1853	1854	463	1, 081	195	8, 500
NEW YORK.						
Albany	1844	1844	1, 585	4, 3 8	356	16, 000
Oswego	1861	1861	195	461	80	15, 000
Brockport	1866	1867	.....	.....	.....	12, 000
CONNECTICUT.						
New Britain†	1849	1850	249	2, 349	65	7, 500
MICHIGAN.						
Ypsilanti	1849	1853	230	4, 800	355	10, 000
RHODE ISLAND.						
Bristol	1852	1852	.....	722	.....	2, 500
IOWA.						
Iowa City*	1855	1855	75	1, 000	94	.....
NEW JERSEY.						
Trenton	1855	1855	310	927	219	10, 000
Beverly	1856	1856	.....	.....	280	1, 200
PENNSYLVANIA.						
Millersville	1859	1859	96	3, 754	652	5, 000
Mansfield	1862	1862	36	1, 290	252	5, 000
Edinboro	1860	1861	30	1, 444	425	5, 000
Kutztown	1866	1866	.....	405	343	5, 000
ILLINOIS.						
Normal	1857	1857	81	1, 500	327	12, 500
SOUTH CAROL'NA.						
Charleston†	1857	1859	.....	491	.....	.....
MINNESOTA.						
Winona	1858	1860	41	87	80	5, 000
WISCONSIN.						
Madison†	1862	1863	.....	.....	128	.....
Platteville	1866	1866	.....	205	205	9, 000
Whitewater	1866	.....	.....	.....	.....	.....
Oshkosh	1866	.....	.....	.....	.....	.....
CALIFORNIA.						
San Francisco	1862	1862	56	262	87	8, 000
KANSAS.						
Emporia	1864	1865	2	200	130	5, 000
MAINE.						
Farmington	1864	1864	42	.....	331	4, 400
Castine	1864	1867	.....	.....	25	2, 000
MARYLAND.						
Baltimore	1865	1866	51	203	152	6, 000
VERMONT.						
Randolph	1867	1867	6	125	125	.....
Johnson	1867	1867	5	73	73	.....
Castleton	1867	1868	.....	4	.....	.....
NEBRASKA.						
Peru	1867	1867	.....	.....	.....	.....
LOUISIANA.						
New Orleans†	1856	1859	16	131	.....	.....
INDIANA.						
Terre Haute	1867	.....	.....	.....	.....	10, 000
WEST VIRGINIA.						
Guyandott	1867	1868	.....	.....	.....	10, 000
West Liberty	1867	1868	.....	.....	.....	10, 000

* Normal Department in State University. † Converted into a female college. ‡ Suspended.

[Dr. Barnard during his connection with the Normal School, confined his labors, beyond that of general supervision, to the Common Schools of the State, of which he was *ex-officio* Superintendent, while the immediate duties of the School, both of administration and instruction, were devolved on Rev. T. D. P. Stone, the Associate Principal. Mr. Stone resigned in November, 1852, and John D. Philbrick, at the time Principal of the Quincy Grammar School, Boston, was appointed Associate Principal, and entered upon the duties of the office in January, 1853.

In 1855, Dr. Barnard, on account of ill health, was compelled to resign the office of Principal, and Superintendent of Common Schools, and Mr. Philbrick was appointed to the two offices, and David N. Camp was appointed Associate Principal. In January, 1857, Mr. Philbrick resigned, to accept the office of Superintendent of Schools in Boston. Mr. Camp was appointed Principal, and Superintendent of Common Schools, and Charles F. Dowd was appointed Associate Principal. Mr. Dowd was compelled to retire on account of ill health in 1858, and Henry B. Buckham was appointed his successor. Mr. Buckham resigned in 1864, and the vacancy was filled by the appointment of John N. Bartlett, Associate Principal.

By an act passed by the General Assembly, near the close of the session in 1865, a State Board of Education was created. The supervision of the Normal School was transferred from the Board of Trustees to this new Board, and the law constituting a Board of Trustees was repealed.

The Board of Education, on assuming the direction of the School in 1865, reappointed the teachers employed by the Board of Trustees. Mr. Camp resigned in 1866, and Isaac N. Carleton was engaged to act as Principal for one term, when Homer B. Sprague was appointed to the office, and continued in charge of the School, until its suspension in 1867, under the following announcement of the State Board of Education:

"In accordance with the following Resolution of General Assembly, May Session, 1867—

Resolved, That the Comptroller of the State be and he hereby is directed to draw no further orders on the Treasurer of this State in behalf of the State Normal School, than what is necessary to pay the debts incurred under contracts already existing—

the Board of Education have voted to suspend the Normal School at New Britain for the ensuing year. They reach this decision with great reluctance and regret."

RESULTS.

The Normal School of Connecticut remained under the supervision of the Board of Trustees until the close of the Summer term in 1865. At that time, two thousand two hundred and fifty-eight different pupils had been connected with the School. Nearly all of this number have been employed as teachers in the schools of Connecticut. In 1856, Hon. J. D. Philbrick, then Superintendent of Common Schools, reported "nearly four hundred teachers employed in the State, who had been for a longer or shorter period members of the State Normal School." The number

thus employed continued steadily to increase, and in 1864-65 it was ascertained that more than six hundred of the teachers in the schools of the State had been members of the State Normal School. The Trustees in their last report for 1865, state that one hundred and twenty-three teachers were known to have gone forth from the Normal School the previous year, to prosecute their labors in the schools of the State. Many of the common schools had been supplied entirely with teachers from the Normal School for ten or twelve years, the school officers sending directly to the Principal for teachers, whenever vacancies occurred in the schools in their districts. The testimony in reference to the success of teachers from the Normal School, and the beneficial influence of the School upon the schools of the State, is abundant and very satisfactory. Mr. Philbrick, in his last report as Superintendent in Connecticut, says: "Many of the graduates of this School are making themselves eminently useful as teachers, and a few are at the head of some of our largest and best graded schools."

In 1863, the Joint Standing Committee on Education of the General Assembly were instructed by resolution of both Houses to inquire into the affairs and management of the State Normal School. After a prolonged and careful investigation, they made a full report, from which the following extract is taken:

"Your committee have taken special pains to ascertain the standing as teachers of the graduates and undergraduates of the State Normal School, and to learn of their success as compared with that of other teachers, and for this purpose have sought and received testimony from all parts of the State.

It is not to be expected that every one entering upon the duties of a teacher will be found thoroughly fitted, either by natural or acquired endowments, for his chosen position; yet, so far as we can learn, all the regular graduates of the school, without exception, have been more than ordinarily successful as teachers, and many of them are filling places of responsibility in our largest and best public schools.

The demand for these teachers in our own State greatly exceeds the supply, and such is their reputation that the diploma of the Connecticut Normal School gives the holder a higher position in some States than the diploma of their own normal schools.

Testimony has been received from members of Boards of Education, District Committees, Principals of large public schools, and others interested in educational pursuits, from every county in the State—testimony which is confirmed by a careful investigation of all seeming opposition—that as a class, the graduates and undergraduates of our State Normal School are more sought for as teachers, pass better examinations, are stricter disciplinarians, are more thorough and systematic in teaching, waste less time in educational experiments, are more ready to improve by suggestions, have more laudable pride in their profession, show larger results, and give to school committees, parents and guardians, better satisfaction than teachers from other sources."

In 1867, the Joint Standing Committee of the Legislature on Education, after a hearing of the opponents of the School, and visiting the institution, and examining the classes, unanimously recommended the continuance of the Normal School, as an institution highly honorable and useful to the State, and practically efficient in training teachers for their responsible work.—D. N. C.]

The Normal School was continued in operation at Bristol until the close of the summer term in 1865, when by the action of the Board of Trustees, it was indefinitely suspended. The following extracts from the reports of the Trustees explain the cause of suspension. In the report dated January 2d, 1865, the Trustees say :—

"There are not so many pupils in the school as formerly, and in this respect it does not meet our expectations. But the causes of this decline are obvious enough. It is not because we have not successful teachers, for they are all that we can ask. Nor is it from want of sympathy and coöperation from the people of Bristol. They still maintain their original attitude of generous welcome. It is not that Normal schools are declining in popularity, or losing their hold upon the minds of experienced educators. They are everywhere gaining in public estimation. The chief reason for the decline of our school is, as we believe, that it is located so far away from the centre of railroad travel. Undoubtedly the increased expense of living, the fact that teachers' wages do not rise correspondingly, and the fact that other departments of labor are demanding more of the kind of talent needed in the school-room, all go to reduce somewhat the attendance at the Normal School. But after making due allowance for these and kindred considerations, we are still compelled to believe that, if the school were returned to Providence, or located in its immediate vicinity, so as to give the pupils easier access, and an opportunity to board with friends in and around the city, as well as to profit by the greater opportunities for general intellectual culture, it would revive and reach its former prosperity."

And in 1866 :—

"The uncertain condition of the School as to its future location, and whether the Trustees would be enabled and authorized by your honorable body to remove it to a more central and accessible location, (we mean accessible so far as it relates to the practicability of pupils from various parts of the State attending the School and returning to their homes on the same day, as was the case when it was located at Providence,) induced your Trustees to suspend the School from March until after the meeting of the Legislature at its May session. At a subsequent meeting of your Trustees, in April, the subject of connecting the School with the Providence High School was considered. A committee was appointed to confer with the committee and superintendent of the Providence schools, but it was found that no satisfactory arrangement could be made that would be likely to prove at all advantageous to the Normal School.

Seeing no prospect of relief, your Board, at its quarterly meeting in July, suspended the School indefinitely. Thus it remains awaiting your further action."

Prof. Kendall resigned and retired from the School at the close of the Winter term in 1865, and the School was continued in the charge of Miss Ellen R. Luther until the close of the Summer term of that year. The whole number of different pupils during the last year for which a report was made, or for 1864, was forty-eight, and the whole number of teachers who attended on the instructions of the School from the opening in 1852, was about seven hundred.

COURSE OF STUDY IN THE NORMAL SCHOOLS, ADOPTED JANUARY 9, 1866.

THE design of the Normal Schools is strictly professional; that is, to prepare, in the best possible manner, the pupils for the work of organizing, governing, and instructing the Public Schools of the Commonwealth.

To this end there must be the most thorough knowledge: *first*, of the branches of learning required to be taught in the schools; and, *second*, of the best methods of teaching those branches.

The *time* of the course extends through a period of *two years*; and is divided into terms of twenty weeks each, with daily sessions of not less than five hours, five days each week.

The branches of study to be pursued are as follows:

First Term.

1. Arithmetic, oral and written, begun.
2. Geometry begun.
3. Chemistry.
4. Grammar and Analysis of the English language.

Second Term.

1. Arithmetic completed; Algebra begun.
2. Geometry completed; Geography and History begun.
3. Physiology and Hygiene.
4. Grammar and Analysis completed.
5. Lessons once or twice a week in Botany and Zoölogy.

Third Term.

1. Algebra completed; Book-keeping.
2. Geography and History completed.
3. Natural Philosophy.
4. Rhetoric and English Literature.
5. Lessons once or twice a week in Mineralogy and Geology.

Fourth Term.

1. Astronomy.
2. Mental and Moral Science—including the principles and art of Reasoning.
3. Theory and Art of Teaching,—including:
 - (1.) Principles and Methods of Instruction.
 - (2.) School Organization and Government.
 - (3.) School Laws of Massachusetts.
4. The Civil Polity of Massachusetts and the United States.

In connection with the foregoing, constant and careful attention to be given throughout the course to drawing and delineations on the blackboard; music; spelling, with derivations and definitions; reading, including analysis of sounds and vocal gymnastics; and writing.

The Latin and French languages may be pursued as optional studies, but not to the neglect of the English course.

General exercises in composition, gymnastics, object lessons, &c., to be conducted in such manner and at such times as the Principals shall deem best.

Lectures on the different branches pursued, and on related topics, to be given by gentlemen from abroad, as the Board or the Visitors shall direct, and also by the teachers and more advanced scholars.

The order of the studies in the course may be varied in special cases, with the approval of the Visitors.

The Board deem it unwise to encourage the formation of regular advanced classes, whose instruction can not fail to divert a considerable amount of the time and attention of the teachers from the under-graduate course; but graduates who wish to review any part of their course, or to make more thorough attainments in particular branches, and who are willing to render such assistance as may be needed in giving instruction in the schools, may, with the consent and under the direction of the Visitors, remain at the schools for a period not exceeding two terms.

STATE NORMAL SCHOOL

AT FRAMINGHAM, MASS.

HISTORY.

THE STATE NORMAL SCHOOL at Framingham, the first Normal School under State auspices in America, was opened at Lexington, with a formal Address by Gov. Everett, July 8d, 1839.* Three young ladies were all that presented themselves as candidates for examination. The school commenced with these, and the number increased in a few weeks to twelve. In October, a Model School was organized and placed under the charge of Miss Mary Swift. The school continued at Lexington for five years. In May, 1844, having outgrown its accommodations, it was removed to West Newton, where Josiah Quincy Jr., purchased a building, formerly used as a private Academy, which he gave to the Secretary of the Board of Education, who had searched in vain for a suitable structure within the means of the Board. The building was out of repair, but at the expense of Mr. Mann, and the contribution of the citizens of West Newton, it was put in proper order for the use of the school. The school increased in numbers, and additional accommodations were provided in the rooms at first occupied by the Model Department, which were vacated on the removal of the Model School to other quarters provided by the town.

In 1850 and 1851, the Board of Education took measures to bring before the Legislature the increasing wants of the school, and in May, 1852, the sum of \$6,000 was placed at the disposal of the Board, to defray the expenses of providing a more commodious site and building. The Board were directed to receive propositions from towns and individuals, and afterwards to make such selection as would, in their opinion, best subserve the interests of the institution. After carefully considering the propositions presented, the Board determined to transfer the school to Framingham, where it was opened December 15th, 1853.

The building now occupied by the State Normal School, with the preparation of the grounds, and the furniture, cost about \$20,000. The site, consisting of five and three-quarter acres of land, was presented by individuals. The town appropriated \$2,500, and the Boston and Worcester Railroad Company \$2,000, in aid of the erection of the building.

The first Principal, Rev. Cyrus Peirce, was compelled to resign on account of ill health, in 1842. His successor, Rev. Samuel J. May, had charge of the school from Sept. 1842, to Aug. 1844, when he resigned, and Mr. Peirce, who had recovered his health, was re-appointed, and re-

* This Address was repeated at Barre, on the 5th of September, 1839, on the opening of the Normal School at that place.

sumed his duties in September, 1844. Mr. Peirce again failed in health, and was compelled to resign in April, 1849, and Rev. Eben S. Stearns was appointed to succeed him. Mr. Stearns resigned in 1855, and Mr. George N. Bigelow, his successor, remained in charge of the school from that time till 1866, when on his resignation, the Board of Education determined to place the school under the charge of a lady, and Miss Annie E. Johnson was appointed Principal. Miss Johnson was installed September 4th, 1866. This occasion, the first instance of a State Normal School being placed under the charge of a lady, was inaugurated by addresses from Gov. Bullock and Ex-Gov. Emory Washburn.

CONDITION IN 1867.

The following information of this school is from a Circular for 1867 :

Nature and Design.

This School was established by the State of Massachusetts for the preparation of female teachers to instruct in her public schools. Pupils are admitted from any State in the Union.

Tuition is free to those intending to teach in the public schools of Massachusetts; but those intending to teach in other States, or in private schools, are required to pay \$15.00 a term for tuition. At the beginning of every term, each pupil pays \$1.50 to meet incidental expenses.

Conditions of Entrance.

Candidates for admission must be at least sixteen years of age; must give a pledge to remain in the School at least four consecutive terms, and to observe faithfully all the regulations of the Institution; and must declare their full intention of teaching in the public schools of Massachusetts after graduation. They must also present a certificate of good physical, intellectual, and moral character, from some responsible person, and pass a satisfactory examination in reading, spelling, writing, defining, grammar, geography, and arithmetic.

The examination for admission takes place on Tuesday, the first day of each term, commencing at nine o'clock, A. M. Special examinations are allowed, in unusual cases, for a few days after the commencement of the term.

Every pupil must furnish herself with a Bible, a dictionary, and a common atlas, and can bring such other books as the applicant may have.

Terms and Vacations.

The school-year, consisting of forty weeks, is divided into two terms. The first term commences on the first Tuesday in September, and the second on the third Tuesday in February. The first term is preceded by a vacation of eight weeks, and the second by one of three weeks.

Studies.

The course of study includes reading, with analysis of sounds and vocal gymnastics; writing; spelling, with derivations and definitions; punctuation; grammar, with analysis of the English language; arithmetic; algebra; geometry; physical and political geography, with map-drawing;

physiology; botany; zoölogy; geology; natural philosophy; astronomy; mental and moral philosophy; school laws; theory and art of teaching; civil polity of Massachusetts and the United States; English literature; vocal music; and drawing.

Constant and careful attention will be given throughout the course to drawing and delineations on the black-board.

The Latin and French languages may be pursued as optional studies, but not to the neglect of the English course. There are general exercises in composition, gymnastics, object-lessons, &c.

Lectures on the different branches pursued, and on related topics, are given by gentlemen from abroad, as the Board or the Visitors shall direct; and also by the teachers and more advanced scholars.

Graduates who wish to review a part of their course, or to make more thorough attainments in particular branches, and who are willing to render such assistance as may be needed in giving instruction in the school, may, with the consent and under the direction of the Visitors, remain at the school for a period not exceeding two terms.

The length of the regular course is two years; but pupils who have had much experience in teaching, and are well qualified, may complete it in a year and a half, the shortest time for which one can be a member of the school. Those who, in all probability, would become successful teachers, but who fail for any reason to complete the course in the required time, must, and others who desire it may, take a longer time.

The special professional training consists, 1st, of plans of exercises on each subject studied by the class. These plans are presented orally for the criticism of teachers and pupils. And 2d, of teaching exercises given by the Senior class to a class of children who come in from one of the public schools in town.

Board.

The price of Board varies from \$4.00 to \$4.12½ per week. There is generally an extra charge for fuel and lights. Pupils are not permitted to board so far from the Institution as to render it impracticable for them to be present at all the regular exercises.

Library, Apparatus, and Cabinet.

A well-selected Library belongs to the school, to which the pupils have daily access. The text-books in most of the English studies, and music, and encyclopædias, dictionaries, and many other works of reference, are furnished to the pupils free of charge. The school is well supplied with apparatus for illustration in natural philosophy and chemistry, and has a valuable cabinet of minerals and geological specimens.

The friends of education are earnestly desired to contribute books and pamphlets for the library; philosophical and chemical apparatus; minerals and specimens of natural history for the cabinet. These will add greatly to the present means of usefulness of the Institution.

The Institution is situated on a beautiful eminence, commanding a fine westerly view, that embraces a part of the village, and a wide and varied landscape. The society of the place is of an elevated character. There are churches of the Unitarian, Baptist, Congregational, and Episcopal orders; and each pupil is expected to attend regularly such one of these as she may select at the commencement of the term.

The number of pupils who have entered the Normal School is 1,541; the number who have graduated, 1,092; number in 1867, 158.

LESSON OF THE HOUR.

In the "Memorial of the Quarter-Centennial celebration of the establishment of State Normal Schools in America, held at Framingham, July 1, 1864," we find a letter from George B. Emerson, LL. D., in which he inculcates the "Lesson of the Hour," as drawn from the life of Father Peirce, and the teachings of this school:

Aim only at the highest ends: Appeal only to the purest and highest motives: Fill your souls with the noblest aspirations, your hearts with the warmest affections, your minds with the richest thoughts, and consecrate all to the great work in which you are engaged, the best and noblest work to be done on earth: Aim always at perfection; "Be ye therefore perfect,"—as no lower aim is adequate to the immortal destiny of man: Appeal always to conscience, so as to exercise it constantly from the beginning; asking, in every event, what is right and good, and what is evil and wrong, and faithfully listening to its dictates and following them: Inculcate the great truth that all pleasure, all enjoyment, must come from the exercise of one or more of our faculties of body or mind, and that labor of body or mind is thus the great blessing of humanity: Prepare for the leisure of life and for old age: Inculcate accountability to one's self as an immortal being, destined to bear the consequences of neglect and enjoy the fruits of faithfulness,—accountability to God as His child, for every power and opportunity to do good to his other children,—the imitation of good and great men, the benefactors of the race,—the imitation of Christ.

Never appeal to brute force except when it is absolutely demanded; remembering, however, that corporal punishment may sometimes be necessary, but he must be a poor teacher who often has recourse to it. Never appeal to emulation, but insist on the divine lesson, "in honor preferring one another:" Remember the injunction of the holy Paul, "Be not overcome of evil, but overcome evil with good," and that the only absolutely irresistible power is ever-enduring, wholly unselfish love.

The teacher *must* be armed with this principle. She *must* love children; and she ought to remember that all of them are or have lately been of that number of whom the Divine Master said, "Of such is the Kingdom of Heaven."

Remember that the art of teaching, which should be the oldest, is really the newest of arts; that, in most schools, in all departments, much time is wasted in teaching what is of little value, while many things, most important for the child to learn, are not taught at all. In short, what should be the great and leading object in every school,—preparation for the duties and labors of life—is, in many ways, in schools of all grades, almost entirely neglected.

FRAMINGHAM STATE NORMAL SCHOOL.

HISTORICAL SKETCH.* BY REV. ESEN S. STEARNS.

BETWEEN the years A. D. 1820 and 1835, there appeared upon the stage a small class of intelligent, cultivated self-sacrificing men, with all the vigor and freshness of early manhood, who saw, as it were at a glance, how matters stood [in elementary schools]; deplored the educational decline; and began earnestly, and, in general wisely, to apply the remedy. An "Educational Revival," as our brother, the Orator, has aptly termed it, took place. The people began to see that a right education, widely diffused, would prove the glory of the State—nay more, was for her the only source of influence, power, and lasting greatness.

Time and present circumstances forbid us to speak in fitting terms of these Educational Revivalists, to portray their characters, and to recount the noble deeds which each performed. Indeed, thank God! many of them yet live; yet enjoy the rich fruits of their early labors; are yet able and ready to lend a helping hand to every good work†

Foremost, perhaps, among these pioneers, was JAMES G. CARTER, genial as a friend, accomplished as a teacher, ardent as a politician, who fought most manfully, and for a time nearly alone; and to whom it is believed, belongs the honor not only of starting the great reform, but of perceiving how essential to its completeness and permanent utility, would be the thorough, professional education of teachers under public supervision and at the public charge. His newspaper articles on popular education, from A. D. 1821 to '24,—his letters to Hon. William Prescott, LL. D., on the Free Schools of New England, with Remarks on the Principles of Instruction,—his Essays upon Popular Education, containing a particular examination of the schools of Massachusetts, and an outline for an Institution for the Education of Teachers,—his Memorial to the State Legislature in 1827, praying for aid to establish a Seminary for the Education of Teachers, with a Model School attached,—his efforts in Lancaster, his native town, to carry out the school as a private enterprise,—his activity and influence in founding the "American Institute of Instruction" in 1829-30, that noble society which for thirty years has been a source of life to the educational interests of the country,—his unremitting labors as a politician in behalf of Popular Education,—his successful introduction of a bill establishing the Board of Education,—the detraction, persecution and financial disasters he encountered in the advocacy of his schemes,—all these entitle James G. Carter to a most honorable mention.

There were WILLIAM C. WOODBRIDGE, a teacher and the son of a teacher, distinguished as a geographer and editor of the *Annals of Education* and other works,—and SAMUEL R. HALL, for many years a teacher of teachers, and in 1829, the founder, at Andover, of a Seminary for Teachers—the first regular seminary in this country designed for such an object—a genuine Normal School,

* Abridged from an Address delivered at the Quarter Centennial Celebration of State Normal Schools in America, at Framingham, July, 1864.

† Memoirs of the Educational Labors of James G. Carter, William C. Woodbridge, Samuel R. Hall, Thomas H. Gallaudet, William A. Alcott, Horace Mann, Samuel Lewis, Walter R. Johnson, Josiah Holbrook, Cyrus Peirce, Samuel J. May, George B. Emerson, Charles Brooks, Edmund Dwight, William Russell, Edward Everett, Francis Wayland, Warren Colburn, Mrs. Emma Willard, Nicholas Tillinghast, and other laborers in the educational field from 1825 to 1850, have appeared in *Barnard's American Journal of Education*, and are gathered into *American Educational Biography*, vols. I. and II.

though not of State patronage or adoption,—and GARDNER B. PERRY, of Bradford, a modest country clergyman, in early life a teacher of a distinguished literary institution, who through a long and able life labored as he found opportunity, to promote popular education.

There, too, were THOMAS H. GALLAUDET, the skillful, devoted instructor of the deaf and dumb, who made the dull ear to hear of the wonders of the creation, and the tongue of the dumb to sing the praises of God,—and WILLIAM A. ALCOTT, the eccentric physician and educator and author of many good books.

HORACE MANN, the first Secretary of the Board of Education, came late into the work, [1887] but brought with him all the powerful energies of his mature life; all the learning, culture and acumen which had distinguished him at the bar; all the knowledge of human nature and skill in management which made him successful as a politician; and all the influence which he had acquired among the people. Withdrawing himself from less laborious and far more lucrative occupations, he gave himself, soul and body, to the great enterprise. Of his earnest, self-sacrificing devotion, of his indomitable perseverance amid opposition and reproach, of his enormous personal labors, we cannot here speak. The prime agent in establishing the Board of Education, its *soul* as well as its Secretary, he was the establisher of *this* school, and its most earnest and constant friend, so long as it continued within his reach; and but for him it would have died for want of that mere pittance on which so much of its life has been supported, and which, again and again, he secured.

Prominent among these was EDMUND DWIGHT, the merchant prince, as unostentatious as munificent, whose open purse enabled the Secretary to live, which State patronage alone never could have done; and whose timely gift of \$10,000 to the State of Massachusetts, presented March 10, 1838, secured from its Legislature a corresponding grant; and was, as Mr. MANN has expressed it, “the origin, the source, the *punctum saliens* of the Normal Schools of Massachusetts.”

But time fails me to speak of SAMUEL LEWIS, WALTER JOHNSON, JOSIAH HOLBROOK, JOHN A. SHAW, and a host of others. These and many more rest from their labors and their works do follow them.

We have yet with us, thank God! WILLIAM RUSSELL, the Educational journalist and associate of Woodbridge, whose native grace and charming elocution were as attractive as his pen was persuasive, and whose whole life has been spent in urging forward the work of popular education:

SAMUEL J. MAY, the accomplished orator of this occasion, and the second Principal of this Institution; the record of whose life is self-sacrifice, and earnest, unremitting endeavor in every good word and work designed to benefit mankind:

CHARLES BROOKS, whose labors in the years 1835-6-7, were second to those of no man—one might almost say to no number of men—to whom we owe the particular *form* which Normal Schools took, and who did very much toward preparing the public mind to look with favor upon the new system; who, beginning with his own parish in Hingham, for the space of three years, without compensation or payment of expenses, traveled over New England, lecturing upon the Prussian system of Elementary Education, with especial reference to Normal Schools. From his friend, Victor Cousin, the first scholar of France, he obtained reports and documents, and encouraging words, which were to him the pabulum vite; for in this phase of the enterprise he stood almost if not quite alone; yet planting his feet literally on “Plymouth Rock,” he was conscious of strength. In behalf of a convention of teachers, called by him in Plymouth, he memorialized the Legislature in 1837, and was twice called before that body to speak upon his favorite subject:

HENRY BARNARD, as much as any man in this country, entitled to be called *the Educator*, whose fruitful labors are in their prime, and are destined to produce results greater and still greater as time progresses, and of whom this is not the place to speak at length.

Time and your patience fail me to speak of others who deserve the most honorable mention, and a large place in the affections of the hosts whom they have benefited. One more only shall be spoken of. I refer to Mr. GEO. B. EMERSON, whose whole life has been given to educational labors. The son of a distin-

guished physician, full of interest in popular education, and of labors to promote it, he has by inheritance the qualities which, under his own careful training and culture, have made him eminent in his profession, and distinguished him as the friend of common schools. In A. D. 1821, he was selected to fill the responsible office of Principal of the English High School in Boston, then just established. The work of organization, the plans and course of study, the nature of the discipline to be used, the means and motives to be employed, the moral and religious principles to be urged, all were left to his wisdom, skill and goodness. How well he did his work, let that noble institution, from that hour to the present the just pride of the city, tell. To him Warren Colburn, his friend, submitted the manuscript of that best of works on the science of numbers, "First Lessons in Arithmetic," that, lesson by lesson, he might practically test the work in his school; and the deserved popularity of this book was owing to Mr. Emerson's warm recommendations. In 1827, Mr. Emerson withdrew from the High School to open a Private School for Young Ladies, which he conducted with the most eminent success for more than a generation; retiring from it in 1855, at a moment when, if possible, its popularity was greater than it had ever been before.

Mr. Emerson, in 1827, was instrumental in forming the Boston Mechanics Institute, was its first Secretary, gave the opening address and delivered the first course of Lectures. In 1830 he was one of the foremost in forming the American Institute of Instruction, was its first Secretary, and for many years its President. In 1836, he was Chairman of a Committee to memorialize the Legislature on the subject of the Superintendence of Common Schools, and drew up the memorial. No particular action being taken by the Legislature, in 1837 a second memorial, also drawn up by Mr. Emerson, was presented, on the establishment of a Seminary for Teachers. In 1843 he wrote the second part of the School and School Master, one of the wisest and best works of the kind ever given to the public. In 1830 he was active in the formation of the Boston Society of Natural History, of which he was for many years President, and he was also for many years Corresponding Secretary of the American Academy of Arts and Sciences. In 1837, having been appointed by Gov. Everett Chairman of a Commission to conduct a Botanical and Zoölogical survey of the State, he gave to the public his admirable and exhaustive report on the "Trees and Shrubs of Massachusetts."

From the very first, almost of course, Mr. Emerson was deeply interested in the Normal Schools, and labored assiduously to promote their interests. In 1847-8, he was member of the Boston School Committee, and the latter year was chosen a member of the Board of Education, and during the eight years of his service was most active and influential. He has been for several years, since his return from Europe in 1856, the Treasurer of the Board.

The bill establishing the Board of Education was approved by Edward Everett, then Governor of the State, on the 20th of April, 1837. Horace Mann was then President of the Senate. At the first meeting of the Board, June 29th, 1837, Mr. Mann was chosen its Secretary.

The constitution of the new Board made the ultimate introduction of Normal Schools a certainty. Indeed, any scheme undertaken by such men as Edward Everett, Horace Mann, James G. Carter, Edmund Dwight, George Putnam, E. A. Newton, Robert Rantoul, Jr., and Jared Sparks, was a success the moment they grappled with it. The first two reports of the Board were written by Mr. Everett, and his addresses at Lexington and Barre, with his great personal influence, did much to prepare the public mind to welcome the new measures.

In 1838, on the 19th of April, that day so memorable and glorious, the Legislature by joint resolve accepted the munificence of Mr. DWIGHT, and appropriated an equal sum to the founding of Normal Schools.

The first examination of pupils for admission to the First Normal School established under this resolve, was at the school-house in Lexington, on Wednesday, July 3d, 1839, and the institution began with three pupils. It was a disappointment, cruel, indeed. To feeble minds, the mortification would have been intense, and the seeming failure crushing; but, small at it was, this was a *beginning*, and they knew it, and were content.

Nothing daunted, the Board, on the first Wednesday of September, 1839,

opened a second school at Barre, under the direction of the late Prof. Newman; and on the second Wednesday of September, 1840, a third in Bridgewater, under the direction of the late Col. Nicholas Tillinghast.

It should be here understood that these schools were not at first *State* schools, but the schools of private munificence, *aided* by the State—the State being responsible neither for success nor failure. Consequently, and indeed as a measure of policy also, private aid was solicited and private coöperation secured. To the school in Lexington, a building, used as an academy years before, was given, free of rent, for three years; and some contributions were made by well-wishing citizens for repairs, apparatus, &c. A similar arrangement was effected for each of the other schools.

The gentleman selected by the Board of Education to commence the experiment at Lexington, was Rev. Cyrus Peirce, a native of Waltham, Mass., born August 15, 1790, and graduated at Harvard College in 1810, where he left behind him a reputation for pure morals, upright demeanor, and thoroughness in scholarship. In his sophomore year he taught the village school in West Newton, where he was destined nearly fifty years after to close his long and successful educational career. Soon after leaving college, in 1810, he took the charge of a private school on the island of Nantucket; whence, after two years of acceptable labor, he returned to Cambridge, and completed a course of study preparatory to the Christian ministry. After spending three years in preparation for what he looked forward to as his great life-work, he was urgently solicited to return to Nantucket and resume the work of instruction. Here he labored with his accustomed zeal and success until 1818, when he relinquished his place and entered upon the work of the ministry. During his residence in Nantucket Mr. Peirce was united in marriage with Miss Harriet Coffin of that place, to whose wisdom in counsel, readiness and constancy of sympathy, promptness and energy in action, combined with cheerfulness and hopefulness of disposition, and rich and varied culture, he doubtless owed much of his success in the different positions he afterwards filled. No sketch of his school, at least, could be complete which did not recognize the modest and uncompensated labor of Mrs. Peirce. May she long live to enjoy the gratitude of her own as well as her husband's pupils, and the benign smiles of our Heavenly Father!

Mr. Peirce was settled as a minister in North Reading in A. D. 1819, and continued ably and successfully to perform the duties of his office for eight years, when he resigned and again resumed the work of instruction, subsequently returned again to Nantucket, where he became a recognized authority in all school matters, and was first and foremost in every good word and work. His influence on the common schools of the island was great, and served to make them among the very best in the country. While in charge there of the new public High School, Mr. Mann accidentally met him, visited his school, became charmed with the man and delighted with his work. Hence he was invited, in 1839, as has been stated before, to take charge of the new, difficult and doubtful experiment at Lexington. No one can comprehend the situation of affairs at the time,—the grandeur of the enterprise if successful,—the disastrous consequences, if it failed, without cheerfully considering that this appointment was the highest honor that could be conferred on any educator in the country; without understanding something of his feelings when he exclaimed to his wife, "Harriet, I would rather die than fail in this experiment." To his reputation as an instructor a failure would have been a death from which there would have been for him no resurrection. No wonder that, when he returned home from the disappointment of that first day, he said to Mrs. Peirce, "The Board have made a mistake in electing me; beyond Nantucket I am not known as a teacher, and the public have no confidence in me." The despondency was but a passing cloud,—cheerfulness and hopefulness returned.

The little school at Lexington of three pupils, with some additions in the next few days, was organized, and commenced its noble career, unflinching. Numbers slowly increased; a Model School was organized in October, its first teacher being Miss Swift, now Mrs. Lamson, who is with us to-day; and thus, on a small scale, the system was complete. Many persons will remember how apathetic were the people in general, at this time, in regard to these schools;

while some, ignorant of their true character, misapprehended and misunderstood their design, so that envy and jealousy were soon added to the obstacles to be encountered. In the winter of 1840, a storm of opposition arose, and but for the most skillful management and vigorous battle, the destruction of the Normal School and a dishonorable return of his money to Mr. Dwight, would have been the consequence. God be praised, the Old Bay State, which none love more tenderly than those who no longer dwell among her enlightened people, was saved this burning shame! The victory over political and theological opposition, over narrow-minded jealousy and rivalry, gave rise to a better understanding and an unexpected degree of popularity. So God every where "makes the wrath of man to praise Him." Opposition did not cease at once, but it never again gained strength enough to be very formidable. The school once started and safely through its first winter, continued slowly but steadily to increase until 1842, when the Principal, exhausted by the labors and anxieties attendant upon it, was compelled to resign and recruit his wasted powers. Thus far he had labored alone; and, that he might not give an argument to the most penurious, and in order to make the limited funds hold out as long as possible, had not only managed and taught the school, but had performed some of its most menial offices.

Both Mr. Peirce and Mr. Mann at once fixed upon Rev. SAMUEL J. MAY, as a most worthy successor, and, by their solicitations, Mr. May gave up his parish in South Scituate, and accepted the appointment, Sept. 1, 1842. Mr. May, a native of Boston, was graduated at Harvard University in 1817. During his college life he taught school in the winter, first in Concord and then in Beverly. Having completed his studies, preparatory to the ministry, at Cambridge, he commenced preaching in December, 1820, "the very Sunday after Daniel Webster's solemn charge to the occupants of the pulpit to be faithful to the cause of the enslaved." In 1822 he was settled as a pastor in Brooklyn, Conn., where he remained fourteen years; being, during the whole of that time, a member of the School Committee of the town, and devoting much time and thought to education. It was at his instance, that in 1826 the first popular convention on the subject of education and the improvement of schools was called.* In the years 1832-3-4 and 5, he devoted much time to the anti-slavery cause, in connection with Mr. Garrison, George Thompson, and the abolitionists. From 1836 to 1842 he was minister of the church of South Scituate, Mass., and in the spring of 1845, was settled as minister of the First Unitarian Church in Syracuse, N. Y., where he at present resides. During Mr. May's connection with this Institution its numbers greatly increased, and he was compelled to summon to his aid assistants.

The fortunate selection of Miss CAROLINE E. TILDEN, doubtless added still further to the popularity of the school. Miss Tilden, a former parishioner of his, was educated at the Bridgewater School, and by her peculiar genius and talents, high culture and zeal, was well-fitted for the post. Her heart was full of kindness, her manners attractive, and her eye was an almost irresistible charm. Her career was short; she "preferred to wear out rather than to rust out," and soon passed away. Her associate, Miss ELECTA N. LINCOLN, was a pupil of Mr. Peirce, a pupil and then an assistant of Mr. May, again an assistant and chief support of Mr. Peirce, and most ably conducted the affairs of the institution during the interval between the close of the administration of Mr. Peirce and the beginning of that of Mr. Stearns; and with the latter she labored with untiring zeal and faithfulness, assisting him to carry the school through a most difficult and critical period, as no other could have done, encouraging him by her example and cheerful spirit, until her marriage in 1850 to Mr. George N. Walton, of Lawrence.

It may be well to state here, once for all, that it is impossible even to allude to the many highly cultivated, noble-spirited, self-sacrificing ladies who have from time to time labored in this school. May God bless them all, as they have blessed others!

* An account of Mr. May's Educational Labors, with his Reminiscences of the Educational "Revivalists," will be found in the American Journal of Education, Vol. XVI, pp. 141-145.

The school having now quite outgrown its accommodations, Mr. May urged upon the citizens of Lexington the necessity of providing more ample ones, if they would retain it. But a spirit of apathy had fallen upon the people, or possibly they felt too sure of retaining the school without exertion on their part, and nothing was done. Finding that there was no hope at Lexington, Mr. May visited several other towns in the vicinity, and succeeded in finding in the then greatly secluded village of West Newton, a suitable building and grounds, and a manifest desire for the school on the part of the citizens. The premises had cost originally \$3000, but were greatly out of repair, and were now offered at \$1500. But how to raise the sum was a question. The Board of Education had no funds which could be appropriated for such a purpose,—the munificence of private persons was apparently exhausted,—the prosperous school bid fair to die of poverty. In this strait, Mr. Mann, to whom this school was dear as the apple of his eye, had recourse to an old, well-tried, personal friend, as well as a friend of popular education, who had stood by his side in defense of Normal Schools "when they were a novelty on this side of the water, and ignorance, bigotry, economy and ridicule were arrayed against them." For five years they had progressed steadily in usefulness and popularity, but their permanent establishment was not considered to be certain. The school at Lexington was the most popular, and the scholars more than the building could accommodate. Should it die for the want of \$1500? Should all the anxieties, labors, and triumphant successes be lost for the want of so small a sum? On the other hand, let a building be purchased, and the school would have a home at once; it would be immediately placed above contingencies; it would have stability and strength. No wonder that Mr. Mann, in his anxiety to seize the golden opportunity, and in full view of the glories of success and the sad consequences of failure, in the figurative language which he was, perhaps, more likely to use than approve, exclaimed, as he rushed into the office of the Hon. Josiah Quincy, Jr., of Boston, "Quincy, do you know of any one who wants the highest seat in the kingdom of Heaven? for it is to be bought for \$1500?" Mr. Quincy asked what he meant. An explanation followed. Mr. Quincy, with noble generosity, at once drew his check for the amount, directing Mr. Mann to buy the building, "take a deed in his own name, and, in case the Normal School system should be abandoned, to devote the proceeds that might arise from a sale of the building to the advancement, in any way he pleased, of common school education." The building was out of repair, and Mr. Mann sold his library and stocks, and expended \$1500 of his own money upon it. The citizens of West Newton gave \$600 more, the State added something; the broad seal of permanency was affixed, and success was written over against experiment.

While things were thus progressing with reference to removal from Lexington, Mr. May, finding that his predecessor, Mr. Peirce, had recovered his health, with characteristic modesty and distrust of his own success, at once stepped aside and, by his resignation, August 31, 1844, made way for the re-appointment of Mr. Peirce, which took place September 1, 1844.

Mr. Peirce brought to his work renewed health and vigor, and, if possible, more comprehensive views of its nature and importance. The experiment was now regarded by the public generally as successful, and people began to seek to enjoy its benefits rather than to destroy it. A new Model Department was created and placed in charge of Mr. George N. Walton.

On the 20th of March, 1845, the Legislature resolved, "That the schools heretofore known as Normal Schools, shall be hereafter known as *State Normal Schools*,"—thus formally adopting them into the school system of the State, and, by implication, becoming responsible for their generous support and conduct. That must have been a proud day for Mr. Peirce. His favorite school had succeeded. The little one had become a thousand; the mustard seed a mighty tree, and its leaves were for the healing of nations. After three years more

* To mark the progress of the Normal idea—the necessity of special training for the work of teaching, it may be mentioned that the two last established State Normal Schools will have buildings which will cost—the one at Winona, (Minnesota,) at least \$100,000, and the other, at Terre Haute, (Indiana,) with the grounds, over \$150,000. The grounds and building of the State Normal University of Illinois, cost over \$250,000.

of unremitting labor, the health of Mr. Peirce again broke down, and he was compelled to resign in April, 1849, worn out and grown old before his time; his physical condition bearing witness to the nature and extent of the labor he had performed, and the responsibilities he had borne. On leaving the institution, his pupils and friends, by a public meeting and presentation of \$500, to defray in part his expenses to Europe, testified their appreciation of his services, and love for him as a well-tried, devoted friend.

We have no time to give an analysis of Mr. Peirce's character, or of his method of instruction. This must be left to other persons and a fitter occasion.

Mr. Peirce's successor was EBEN S. STEARNS, a native of Bedford. He was appointed in May, 1849, but did not enter upon his labor until the following September, spending most of the intervening time in visiting schools in this and other States, preparing himself for the work. Mr. Stearns graduated at Harvard University in 1841, and was immediately engaged in teaching; first in charge of the Ipswich High School; then of the Free Street Female Seminary in Portland, Maine, whence he removed to Newburyport, organizing and teaching in the Female High School as its first Principal. During this time he observed carefully the nature and workings of our Common School system; and, being required to establish and conduct a teacher's class in his school at Newburyport, he not only had opportunity to acquaint himself with the Normal Schools, but also to gain considerable experience in the preparation of teachers.

The school now became very large. The Model School was moved across the street to excellent accommodations fitted for it by the town of Newton, and now became, under Mr. Allen, one of the most useful and popular of schools. The room vacated by the Model Department was speedily appropriated to the growing wants of the Normal School. Even this was not enough, and the question of a new building and larger accommodations began to be agitated.

The increase of numbers made possible some changes, which, with a smaller attendance, might have seemed of doubtful expediency. The requirements for admission were more rigidly exacted. Pupils falling short of the required age, but a few days often, were rejected. A severe and binding pledge was given in writing by every candidate, that she would be faithful as a member of the institution, and devote herself to teaching, if qualified, in the schools of this State, and every one unwilling to give this pledge was excluded. The examinations for admission were made as severe as they well could be, and were conducted by members of the Board of Education, assisted by the teachers. None were allowed to stay in the school who did not give promise of aptness to teach, and ability to manage schools, however faithful in study or agreeable in behavior. The course of study was extended half a year, and made as thorough as possible; and an additional three years' course was introduced for such as sought a still higher culture. The carefulness and severity practiced in admitting pupils, the strictly professional character of the school, and the sifting and re-sifting, which the pupils had to undergo, had an obvious tendency to keep down numbers, as well as to raise the standard of acquisition. In 1850, and again in 1851, the Board of Education took measures to bring before the Legislature the increasing wants of the school, and on "May 13, 1852, the sum of \$6000 was placed at the disposal of the Board of Education to defray the expenses of providing a more commodious site and building, and the necessary appurtenances and apparatus for the accommodation of the State Normal School at West Newton; and the Board were directed to receive propositions from towns and individuals in aid of these objects, and afterwards to make such selection as would, in their opinion, best subserve the interests and accommodate the wants of said school. The time for receiving such propositions was limited to six months.

Propositions soon began to come in. Lexington, seeing here an opportunity to recover the ground so carelessly lost, made most praiseworthy and liberal offers, and urged her claims strenuously. Salem, with that large-hearted generosity for which her citizens are so conspicuous, offered to provide such a building as the Board would direct, and meet the expense. Many other places made offers. West Newton was, perhaps, on the whole, the least liberal. The

people had believed the school to be permanently located on the side of their pleasant hills; "they didn't like the idea of other towns trying to buy it away;" "they did not believe that the opulent and liberal State of Massachusetts really wanted their money or cared for more than a testimonial of good will;" they did not realize, that, under Providence, the Normal School and the influences brought with it, and attendant upon it, had raised their village from comparative obscurity to notoriety, and added to it a large and cultivated population and considerable wealth. The landholders did not seem inclined to part with a suitable site for any reasonable sum; and, in short, the effort of West Newton to retain the school, was too feeble to carry with it much weight. The final determination of the Board was to transfer this school to Framingham Centre, and to reward the generous impulses of Salem by creating a new State Normal School which should be located in that city. The Salem school was accordingly soon organized, and from that time to the present has been in a most flourishing condition.

A site for the new school building having been selected in Framingham, the work of erection was soon commenced, and the school removed and established in its new and appropriate quarters on December 15, 1853, on which day the house was dedicated by appropriate services, His Excellency Governor Clifford presiding, and Mr. George B. Emerson making the dedicatory address.

On the 22d of September, 1855, Mr. Stearns, who had been appointed Principal of the Female Academy at Albany, N. Y., resigned his place; and Mr. GEORGE N. BIGELOW immediately succeeded him.

Of the last two administrations we cannot give an extended account, since the historian cannot impartially represent the former of these, and the latter, however prosperous, is still in progress.

In closing this protracted sketch the author must again say that he has found the task of reducing the important facts of history to the limits prescribed, exceedingly arduous, and if much seems dry, or imperfectly stated, or if any fact of importance has been overlooked, he hopes that his desire, ever constant, but unattained, to be very brief, will be the apology.

He must, also, be allowed to recognize the great assistance afforded him in the preparation of this sketch by gentlemen interested in this occasion, and especially by Hon. HENRY BARNARD, from whose excellent Journal many facts have been drawn.

NOTE.

Mr. Bigelow withdrew on account of failing health, in 1866, and was succeeded by Miss Annie E. Johnson, whose inauguration as the first female principal of an institution for the professional education and training of teachers, was signaled by an appropriate address as marking an era in American education.

INAUGURATION OF MISS ANNIE E. JOHNSON,

AS PRINCIPAL OF THE

FRAMINGHAM STATE NORMAL SCHOOL,

September 4, 1866.

REMARKS OF GOVERNOR A. H. BULLOCK.

Gentlemen of the Board of Education and Young Ladies:

I have on many accounts deeply regretted my inability to visit this institution earlier in the year. But that regret is now greatly mitigated by the opportunity to be with you upon the present occasion of so great interest, and to bear a part, by my presence rather than by much speaking, in the ceremony of inaugurating a new mode of making the Normal School system attractive and effective.

This system has now been in successful operation more than a quarter of a century. I have attributed its prosperity largely to two instrumentalities. First, during all this period the schools have been under the oversight and direction of a central Board, comprising gentlemen eminent among the people, fit for this great work, and self-sacrificing in this cause of causes, for the present and the future Commonwealth. And, second, the system began under the management of teachers distinguished for their ability, and has been at all times since kept in such hands.

The distinguished gentleman, one of my predecessors in office, illustrious equally in the practical and the ornamental departments of life (Governor Everett,) under whose administration these institutions were established, marked the new epoch in education by delivering an inaugural address. The last thing I did before coming hither was to read over that very striking address, and I was impressed, as I have often before been impressed, by the freshness and originality which he at all times brought to his discussions of the subject of education—discussions ranging over his whole lifetime, and adapted with wonderful versatility to every occasion and to every grade, from the highest university to the commonest school of the land. I noticed that he treated the present topic with more than his wonted caution, derived from history and philosophy. He spoke of the system as an experiment, and discoursed under the evident restraints of a felt uncertainty as to the degree of public sympathy it might attract, and as to the public disposition to make appropriations liberal enough to carry it to the verge of reality and success. His words of counsel have sunk deep into the policy of the State, while his fears have disappeared like morning clouds before the rising culture which has kept pace with the general prosperity. The system has gone through many changes—of locality, of specific plan of administration, of the measure of money appropriations, and of internal details with which you are familiar. But out of all these vicissitudes it has emerged to have and to hold to-day, in the confidence of the people, the position of the central, primary, and essential instrumentality of the entire

system of schools in Massachusetts. I regard the Normal Schools now as much a certainty in the complicated yet unified organization of persons and things which we call THE STATE, as the legislative or executive or judicial department of the government. To invest these schools with all the requisite intellectual machinery, the State now appropriates nearly thirty thousand dollars annually; and, I doubt not, will increase this amount to meet any reasonable demand. For one, I like this, and take it to heart. I do not believe we can expend too much in this way. I never did believe, and I never shall believe, that from the time of the apparently extravagant expenditure upon Solomon's Temple until now, too much money has ever been laid out on a church edifice, or that from now to the end of time too much of the same article is likely to be expended upon school-houses or school-teachers.

I think that every observing person who has watched impartially the stages of our social progress for the last twenty-five years, must concede that in no calling or pursuit has there been greater advancement than in that of teaching; and that the Normal Schools have manifestly elevated the professional standard in this department. The man who doubts this will doubt all progress—will doubt the benefit of all education—will be unhappy over a world now covered with a network of railroads, and connected in all its parts by the daily communication of a weird tongue which speaks under the seas to all people—and he ought henceforth to have another world and another civilization all his own. We have nothing to do with any such. All men who are fit for our country and our time must agree that these institutions have added dignity and grace and power to the department of education.

And we are here to-day to establish, to mark, to consecrate another stage in this steady and beneficent progress. We commit for the first time to a woman's care and instruction one of these grand public institutions. The institution is worthy of any man or any woman; and I am happy to believe that the woman is worthy of the institution, of the cause it represents, of the consecration she comes here this morning to receive. As the official head of the Board of Education, I need not say that they have arrived at this measure only after mature reflection and much deliberation, and I take pleasure in saying that the theoretical opinions derived from general philosophy and supported by general observation, which have brought them to the present conclusion, have been enforced and illustrated in this instance by the efficient and successful service of the lady into whose hands I now give the keys. We need not doubt that the experiment, if it can be called an experiment, will result in complete and triumphant success.

It is not a little remarkable, that while in all the avenues and retreats of domestic life we have appreciated the power of woman, and have made the recognition of it a part of our religion and of our rhetoric, in this broad field of education our action has been in advance of our theories—and that the greater part of our schools have actually gone into the hands of female teachers before it has occurred to us to frame a theory in support of the practice. It looks a little as if our instincts had proved superior to our wisdom—as if our conduct had outrun our logic, as I believe usually happens in practical life. It proves the power of these conquerors in the State, that noiselessly and without public observation they have taken possession of the school-houses, where their success appears to be as absolute in shaping the characters of a rising generation

of men, as it is afterwards in turning the men themselves to the best account. And thus we have it before us, as a great fact of social progress and public administration, that the best instructors, they who best develop the faculties which afterwards ostensibly prevail and rule in our affairs, are women, whom we have so long acknowledged rather as subjects for our protection than as moving powers of control and government. I speak of them as the best instructors, not to the exclusion of male teachers, and under the limitation of equality with males in acquired attainments and fitness. The induction of Miss Johnson to her office to-day is perhaps the first official and conspicuous announcement of a policy which appears to be founded on philosophical reasoning and on the results of a large experience.

And it is after all a promulgation of a policy which has much to support it in the analysis of the mind and heart of the sexes. I can not at this time expand this topic. I trust, however, that some of the many gentlemen who go about and do the lecturing upon education, while the women are doing so much of the teaching, will sometime favor us with a discussion that shall be worthy of this question. When they shall do that, they will portray those manifest and appreciable qualities, as well as those finer and more subtle qualities of nature and genius and art and culture and divinity, which make woman in many respects the best teacher; best by reason of her masterly power of patience, which is sought in the first and in the last solemn nursery of life—best by her instincts, which are quite as safe as the common logic of men—best by her greater industry, which no labor paralyzes—best by her quicker perceptions, which are brought into beautiful play in all conversational or oral instruction, as well in the school-room as in the social circles—best by her moral sensibilities, which neither physical exhaustion nor mental fatigue can dull—by her radiant countenance, which reflects the soul and becomes a utility as well as a joy forever—by the whole music of her nature, which makes the heart of the universal school-room of mankind to sing in tune with her own.

ADDRESS OF EX-GOVERNOR EMORY WASHBURN.

The circumstances and considerations by which the Board of Education have been led to adopt the change in the direction and management of this school, which has this day been inaugurated, have been so well and ably presented by those who have preceded me, that nothing is left to be supplied. And it remains for me, therefore, only to offer, in their behalf, a few brief suggestions upon one or two topics which seem to be naturally associated with the occasion. One of these is the position which the Normal Schools hold in our general system of popular education. They must from their constitution be regarded in the nature of a specialty. They supply no part of the scheme of free schools which the law originally contemplated as requisite for the wants of the people. Nor do they profess to occupy the place of our academies or private seminaries in furnishing the broader or more liberal culture which these are expected to provide. The purpose they have to serve is a special and peculiar one, and the time within which they are expected to accomplish it is the shortest in which it can reasonably be attempted to be done. Nor is it so much to contribute a given amount of learning, as it is to give to their teaching such a practical character that it may in turn act upon others through the agency of their own pupils. What pupils acquire here, can hardly fail to yield the fruits of liberal

culture in their minds, although the instruction they receive is designed to have an ulterior bearing upon those whom they are themselves to teach. It is therefore not only to communicate useful and valuable learning to their pupils that these schools are maintained, but to explain to them practically the best mode of doing this, that they, in turn, may know how best to apply the processes of educating others, by knowing how they themselves have acquired the knowledge they possess. There is nothing in all this incompatible with the cultivation of science or literature for their salutary effect upon the individual pupil, or with the development of a refined taste or any of those qualities which give ease and grace in the amenities of social intercourse. These are among the legitimate fruits of any well directed intellectual culture. What I mean by this is, that while the scheme of instruction which is prescribed in these schools tends, almost as a matter of course, to the attainment of the graces and accomplishments of scholarship, it has a wider aim and a broader purpose in its practical bearing upon the education of the children in the State.

This gives rise to two inquiries: 1st, What are these pupils expected to teach to others; and 2d, How it is to be done? In answering the first, we approximate the solution of another inquiry, which becomes important in determining the proper functions of Normal Schools. For if it is their object to teach pupils how to teach, it is obvious that the things must first be taught to them, which it will be in turn required of them to teach to others. If therefore it requires a whole two years' attention to these particular branches and those immediately connected with them, to fit a pupil to become a teacher, it must obviously be unwise, to use no stronger term, to divert her attention and occupy her time upon others, however important they might otherwise be considered in the light of general culture. It would be wasting time, for instance, for her to attempt to master Greek or the higher mathematics, not because these are not important branches of education in themselves, but because she can only do this at the expense of what is indispensable for her to know, if she hopes to succeed in the profession she has chosen. The remark applies to any language or accomplishment, the attainment of which requires the pupil to sacrifice any of the qualifications which are essential to success. Nor does the proposition lose any of its force, although, here and there, there may be a pupil whose taste or superior advancement might seem to call for a more extended course of instruction. It is not possible to afford the extra instruction required in such a case, without taxing the teachers with an undue amount of labor, or doing injustice to the other pupils who are pursuing their regular course, or else adding to the present corps of instructors. The objection to the last is, that the public are not sufficiently educated to the importance of these schools to be willing to appropriate money whereby such extra teachers can be procured or paid. One important step has first to be gained, and that is, to get the public up to the point of paying those who are already in the work. There is no class of labor so inadequately paid, if we regard its value and importance, as that of competent, well trained teachers of schools. The public mind is, we are happy to believe, in the process of being enlightened upon the subject; and every good teacher that goes into the field does something to bring sensibly before the people the miserable economy which refuses to provide a fair compensation for good instruction merely because it is furnished by a woman, or because that of a poor quality can be had cheap. The true policy, therefore, in respect to the number of sub-

jects to be studied in these Normal Schools, is to limit them to what can be fully, thoroughly and accurately taught by such a corps of teachers as can be employed and reasonably paid.

If now we turn to the other part of our question, as to how these subjects are to be taught, we shall have to consider what is the condition of those of whom the Normal pupils are expected to have charge. Our tables of statistics inform us that a large proportion of the children in attendance upon our common schools are of an age to be able to take only the primary and early steps in the curriculum of school instruction. Taking the census of 1860 and adding to those who are set down there as being between five and ten years of age, the 5,000 who were in attendance the last year under the age of five, and we have a total of more than 130,000 under the age of ten. I need not say in this presence, that the instruction of these must emphatically be elementary. Much of it must be in the very rudiments of knowledge. And if we go still further and include those between ten and fifteen, we embrace comparatively but few, especially in the country districts, who have advanced beyond the simpler branches of school education. It is to supply teachers for pupils of this grade that the Normal School was chiefly intended. But it may be asked, if this is all that a teacher is expected to accomplish, what is the occasion for speculating how she is to teach what must be so simple and easy to acquire? If teaching was simply mechanical, treating all children alike, and putting them through a daily drill like that of a company of raw recruits, if calling words was reading, and working out a sum in fractions or the rule of three was mastering, to any appreciable degree, the science of mathematics, I might be willing to concede that it mattered little how the teacher taught or the pupil learned these lessons. We might admit with Dogberry that "reading and writing comes of nature," and the old alliteration of the Rs, "*reading, riting and rithmetic*," might be easily acquired. But the more the Normal pupil studies into this matter, the more she perceives that there is a science in every step of intellectual training, and the more anxious she becomes to discover its laws and how they are applied. And she soon perceives that to do this successfully, she must be morally and intellectually, as well as liberally, trained herself. She must have command of the same powers in her constitution which she expects to reach and control in that of her pupils. She must have disciplined powers of attention. She must not only be able to get knowledge, but must be able to trace the steps and processes by which she gains it, and to make others understand and know how to apply the processes by which they too may acquire the knowledge which they seek. Then again her judgment must be trained, her sympathies awakened, and her faculties generally so far under her control as to be brought into lively and vigorous exercise at will. One of the main difficulties to be encountered in making an accurate scholar is, that he does not know how to study till he has been taught. And one of the earliest lessons which a teacher has to make a pupil understand, is what the process of study is. The Normal School aims to supply this very kind of instruction and training, which the pupil is in turn to apply to the children of her charge. And it is for this purpose that the State is careful to provide for them skilled teachers of experience and tried capacity. They deal with their pupils by laying open to their own comprehension the constitution of their own minds, and the processes by which they gain and use knowledge.

But the time in which this knowledge is to be acquired is limited to some eighteen months of actual study, and it is hardly necessary to repeat that the topics which can be thoroughly and effectively taught within that space of time must necessarily be few. Having reference to what their pupils are to teach again, these subjects divide themselves into two classes. One of them relates to what, in the process of learning, becomes incorporated as it were into the mind of the learner, so as to render what is acquired, as it were, intuitive, ready for use without any conscious mental effort. Of this character is the knowledge we get of letters in reading or writing. We forget the slow process by which we originally attained to the name and form and sound of these, both singly and in their combinations. So it is with calling words, or reading aggregates of numeral figures, or repeating the tabular results which we learn by rote from the multiplication table. I need not add how much of this learning is purely arbitrary. There is no process of *a priori* reasoning which could tell me that a certain shaped figure was a letter, or that it represented a certain sound, or that the something called "C" when in connection with a certain other letter, had a sound to which we give the name of K, and with another took the sound of what we call "S." And yet these arbitrary sounds and combinations have to be carefully and accurately taught to the child at the very outset of his school instruction. Nor is it entirely easy for even a skilled teacher to do this effectively. She has got to exercise tact and judgment and skill to adapt her instruction to the capacity of her pupil. She has not only to gain his attention, but must make what she wishes to impress upon him, intelligible to his mind. Compare for a moment the modern method of analyzing the sounds and relations of letters, by writing them before the pupil's eye on the blackboard and repeating the corresponding sound, and the former mode of having him draw out, letter by letter, week after week, in the process of what was called "learning his letters," a mere roll-call of hard sounds and arbitrary names.

So far then as this class of subjects is concerned, the teacher should aim mainly at precise accuracy, which is only to be acquired by imitation and repetition, under a rigid observance of definite rules. But when we go beyond these, to subjects involving reason and judgment as well as memory, in the conception and enunciation of thoughts and ideas which relate to them, something more than accuracy of recitation is required. And that raises the inquiry how far it is wise or necessary to make use of text-books. The question is an interesting one, and not without its difficulty. Learning a lesson out of a text-book and reciting it *memoriter*, as is too often done, does little to enrich or invigorate the mind. A learned recitation scholar is often a learned dunce. And yet the child when set to study, needs something to keep his mind steady, to give to it an orderly direction, to help him fix his attention, and to furnish him a principle of association and ready mnemonics. If the subject of instruction be at all abstract, few children can follow the teacher in an oral statement or a general proposition. Text-books help to supply these necessities of young scholars. Let the pupil learn his prescribed lessons thoroughly and accurately, and let these be arranged in an orderly sequence, and while he is training his memory, he is preparing to receive what his teacher ought to supply from her own well stored mind. The lesson in that way serves for her text, and is to be illustrated and enlivened by such familiar examples and explanations and inquiries as will open to the mind of the pupil new thoughts, and render what he has been

studying intelligible and interesting. And a recitation of this character, instead of being, as it too often has been, a dull, sing-song, meaningless thing, becomes the pleasantest exercise of the day to both teacher and pupil. But to do this implies thought and preparation on the part of the teacher, as much as it does study on that of the pupil. And it is in return a thousand times more inspiring to both than a round of lessons varied only by the different degrees of dullness with which they are recited, or the different intensity of stupidity with which the pupil undertakes to master the words which he is trying to repeat.

Such are some of the hints, and they are merely hints, which are suggested by an occasion when our attention is called to the aims and purposes with which a band of high-minded, hopeful young women are preparing to enter the ranks of the noble profession of teachers.

But I may be met with something like a hint in reply, that this picture of a teacher's life is anything but attractive, from its want of excitement and interest. It would certainly be unfair to deal otherwise than frankly with any one of this class, as to what she is to expect when entering upon the duties and rewards of a teacher. And I am free to confess that there is much to justify the complaint of many in the profession, that it is a life of irksome routine, and that they are in danger of losing the proper stimulus to effort, by having to do with children whose minds are so much inferior to their own. This, however, is but a one-sided view of the question. And even if it presented all its bearings, what department of labor or industry, bodily or mental, is there of which the same complaint of monotony and routine might not be equally just. It is true of the duties and cares of the family. It is true of labor upon the farm, in the workshop and the manufactory. And even in what are called the liberal professions of law and medicine, no small share of their duties are mere matters of routine.

Regarded in this light, it really seems to resolve itself into the question, which is preferable, to go through a certain round of operations upon matter, or to do the same thing with mind? The question, in such a presence, can hardly fail to answer itself. And then again as to the danger of belittling one's mind by such a pursuit. That must evidently depend upon the temperament and habits of the teacher himself. If he is of an indolent, unambitious nature, working only when he is obliged, and content in doing the least possible labor for the most he can get, it makes little difference in the end with the growth of his mind whether he cuts out shoe leather by a pattern, or tends a spinning-frame, or hears boys daily recite a certain number of lines or paragraphs. But if, in the intervals of his work as a teacher, he will go outside of this into the world as it lies spread out before him, and take a part in what is being done and thought and said there, he has no occasion or chance to grow stagnant and rusty, or for suffering himself to subside into the type of Ichabod Crane or Dominie Sampson. Roger Sherman and Nathaniel Greene, of Revolutionary memory, were none the less capable to guide the councils or lead the armies of the Republic because they had spent their lives in the duties and details of the shop or the routine of daily industry. They had been trained and educated while doing this to other thoughts by the influences and circumstances by which they were surrounded. Think for a moment, when you begin to distrust the dignity of the employment which you have chosen as compared with that of any of your neighbors, of what that employment consists. Instead of forcing

the reluctant earth to yield the flowers that bloom for a day, or the fruits that ripen and decay in a single summer, or spending your cunning skill to fashion of wood or metal the parts of a curious machine, you are helping to perfect an engine of power whose subtle elements no human sagacity has ever yet completely analyzed, and whose capacity no calculus has been adequate to measure. The flower which you are to cultivate, though it be cut down even in its unfolding, will be sure to bear seed in other gardens under a more skillful training. What after all is the most calculated to damp the zeal and cool the ardor with which a teacher enters upon her work, is the slow returns which come of her best directed efforts. She either grows weary in waiting for the seed she has planted to spring up, or she finds it springing up on a stony soil, or being choked by the weeds and thorns that show a ranker growth. But this impatience is neither wise nor philosophical. Who that has planted the seedling oak can measure from day to day the growth that it is making? He waits, and in a few years the sapling has begun to assume the form and proportions of the tree, and in due time it rears itself in beauty and strength, till it stands unharmed by the storms that sweep over it. To measure what she has in fact done, the teacher should contrast the child just entering upon the mystic problem of syllables and words, with the beaming face and cheerful alacrity with which he gathers up as he reads from the printed page the incidents of some tale or narrative, or the eager delight with which he listens to the simple truths of science which she unfolds to his attentive ear. Or if she would comprehend the more signal triumphs of her skill, in striking out as it were the spark of genius which may have laid dormant till some such kindly hand has awakened it to life, let her look at the men and women who are stamping the impress of their own mind upon the passing age, and reflect that the world often owes its richest treasures of intellect to some fortunate hint, some word of encouragement given by an earnest teacher to an ingenuous pupil. Nor need she stop even there. If she would take a full measure of the grandeur of that miracle which she is helping to work out in the broader field of a nation's life, let her contrast for a single moment this noble old Commonwealth of ours, with her free schools, with any of the States where slavery has been keeping the human mind locked up in ignorance and barbarism.

Nor does the position of a teacher suffer in comparison with other avocations in which men engage, in the rewards which it offers to honorable personal ambition. I say nothing of it as an avenue to wealth, but of other encouragements which it offers liberal and generous minds. If we analyze the secret springs and motives for what we call ambition, it will be found that they resolve themselves into the love of power—power it may be to do good, or power to control others; and what field is there which opens so wide a scope for an honorable ambition like this as the life and business of a teacher of the young? He may not command the wills or direct the policy of the masses by the power of eloquence, the prerogative of office, or the leadership of a party; but he does far more than this, in guiding the thoughts and directing the judgments and developing the powers of those who are so soon to constitute the living energy of a united people. And in this we should ever bear in mind there is nothing involving superiority of blood or birth. On the contrary, the chance of success in such a mission is with one who, starting in obscurity, has caught something of that spirit which spurns and soars above the accident of name or birth. Nor

is there anything of sex in this power of the teacher to achieve success. If there is, it is in favor of the more refined sensitiveness and delicacy of organization of woman, which give her a readier access to the sympathies and sensibilities of the child. But whoever is engaged in a work like this, be it man or be it woman, is doing something towards shaping the character and destiny of the nation. The great conservative principle of a free government is education and the free school. I congratulate you, Miss Johnson, and your associates, and you, young ladies, on the distinguished presence of the honored chief magistrate of our Commonwealth, and these tried and true friends of education, and the evidence it gives of their appreciation of your services in the cause. I congratulate you that by the experiment this day inaugurated your sex is at last to have one fair field in which to vindicate the confidence which the Board of Education in behalf of the State have, that in the learning and skill and patriotic sentiment of her daughters, the Commonwealth is to share an element of moral power which has never before been fully developed, and that she is in this way to gain new strength and energy to meet the growing demand for influences like hers in the life-struggle through which our country is passing. The free states of Greece did not lose their independence so much from the lack of intelligence and love of liberty in their men, as for the want of the influence, the counsel and the equal companionship of virtuous and high-minded women. The sound of war is indeed hushed, but never has there been such a necessity for wise men and trained and educated teachers as the country feels to-day. Never has the influence of Massachusetts and her schools been more needed in the conflict with ignorance and a vicious political education, in which our country is involved, than they are to-day; and never has woman been called to higher and more responsible duties than those which devolve upon her in the part which she is acting as teacher and educator of the young to whom the ark of our liberties is so soon to be confided.

Take heart then, every one of you, teachers and pupils, while following out the mission in these halls to which they have been dedicated, in the assurance that it is to be your *privilege* to form a part of that noble army who are battling for free thought and the honor and integrity of a nation of free men.

The Special Committee of the Board of Education, in their report on the Normal School at Framingham for 1867, remark:

It is now as well settled that such a Principal and such a corps of teachers are competent to carry on and sustain such a school, as it is that such a school, under any heads, can be an efficient aid and instrumentality in the business of popular education in the State.

But if this be not an exaggeration, if the value of labor is to be judged of by the measure of its results, upon what principle of fairness and equality can we justify the scale of compensation which prevails in the State in respect to our schools? Why should one of two persons who does an important and indispensable work of precisely the same character for the public, equally well and equally acceptably, be paid in the ratio to each other of three to five, or one to two, because, in the economy of nature, one was born a woman and the other a man? It is not for the visitors of this school to engage in a discussion involving the questions now agitating the public mind in regard to the sexes. But they would be unworthy to claim a share in what are called the manly virtues, if they could see labor expended and talent employed, from term to term, and from year to year, for the best interests of the Commonwealth, without protesting that these ought to be paid by some other scale of compensation than the sex of those who perform this labor and bestow this talent.

Fig. 2.—FIRST FLOOR.

V. T.—Ventilating Ducts. S. F.—Smoke Flue. R—Registers for Hot Air.

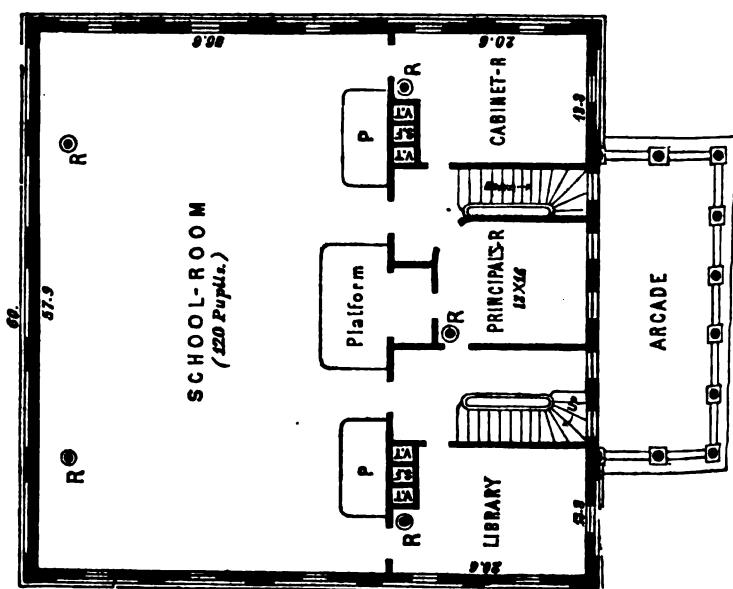


Fig. 3.—SECOND FLOOR.

THE STATE NORMAL SCHOOL AT WESTFIELD, MASS.

THE STATE NORMAL SCHOOL at Westfield, (Mass.,) was first opened at Barre, by an address from Hon. Edward Everett, on the 4th of September, 1839, and suspended in 1841, on its removal to Westfield. It was there re-opened on the 4th of September, 1844, by an address from Rev. Dr. Humphrey, President of Amherst College. In 1860 the building was enlarged by the addition of wings, and thoroughly repaired. From September, 1844, to the close of 1861, the aggregate attendance at the Westfield School was 1,633. It was under the Principalship of S. P. Newman, from September 4th, 1839, to February 10th, 1842; of E. Davis, from September 3d, 1844, to September 3d, 1846; of D. S. Rowe, from September 3d, 1846, to March, 1854; of W. H. Wells, from August 1854, to April, 1856; and of J. W. Dickinson, from April, 1856, to the present time. The following paragraphs are from the Annual Circular for 1862.

Male applicants for admission to the School must be at least seventeen years of age; female applicants, sixteen. There must be an explicit declaration that the applicant intends to become a teacher in the schools of Massachusetts. The applicant must give a pledge to remain in the School at least three terms, the first two of which shall be consecutive.

Candidates for admission must present themselves at the school-room on the first day of the term, at 9 o'clock A. M., and pass a satisfactory examination in Reading, Writing, Spelling, Defining, English Grammar, Geography, and Arithmetic. There will be an examination at no other time during the term, except for special reasons.

Each applicant must present a certificate of good intellectual and moral character, from some responsible person.

The following is the course of study, without regard to the order in which the branches will be pursued, or the length of time devoted to them:—

Geography, Physical and Political, with use of Globes and Outline Maps; Arithmetic; Grammar, and Analysis; Physiology; History of United States; General History, with Ancient Geography; Natural History; Algebra, Geometry; Natural Philosophy, with Experiments; Chemistry, with Experiments; Astronomy; History and Structure of the English Language, with Analysis of Milton and other Poets; School Laws of Massachusetts, and General Principles of Government; Theory and Art of Teaching, with Mental Philosophy; Rhetoric.

Reading, Writing, Elementary Sounds, Etymology, Spelling, Vocal Music, Composition, Recitations of Select Pieces, Extempore Speaking, Discussions, and Moral Philosophy, extend through the whole course.

Botany, Drawing, Latin, and French are optional.

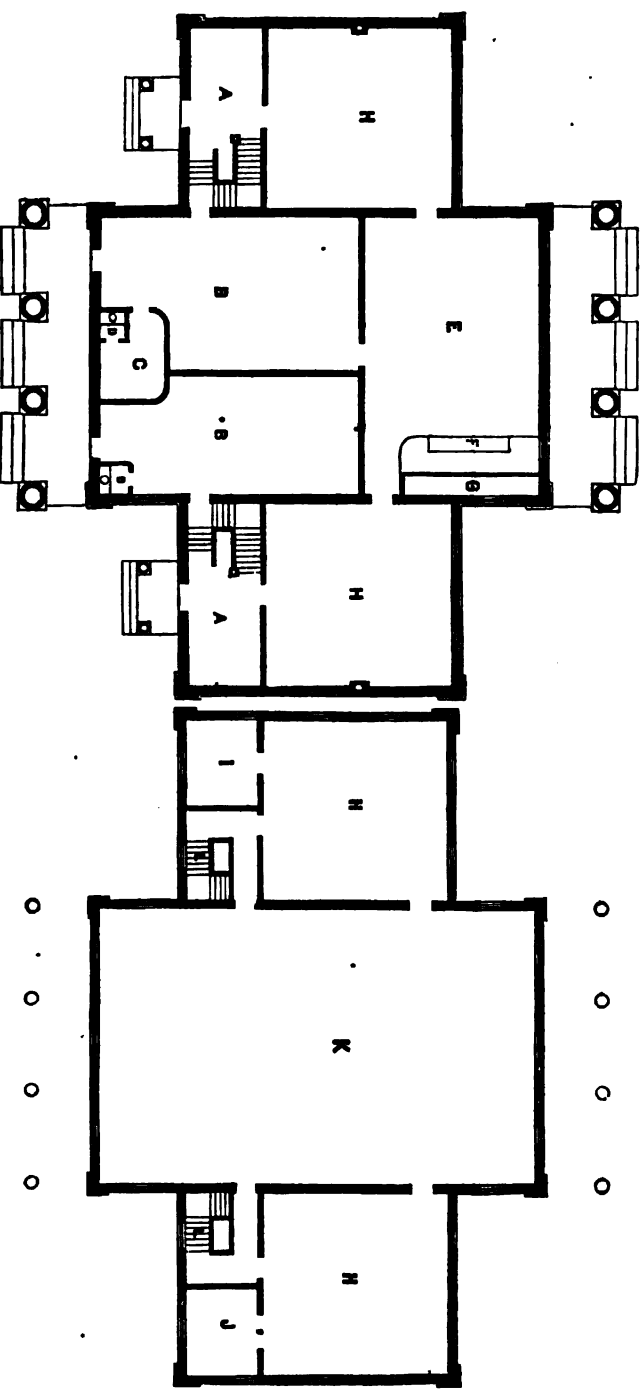
The pupils have daily teaching exercises in connection with the recitations, and the members of the Senior Class devote a large portion of their time to the Theory and Art of Teaching.

Every Wednesday afternoon is devoted to the exercises of the Lyceum conducted by the students.

Every pupil who honorably completes the Course of Study is entitled to the regular Diploma of the Institution, which does not hold itself responsible for any others, although they may have been members of the School.

There will be an advanced Class, which will enable the Graduates of the School to continue their studies beyond the prescribed course.

EXTERIOR OF THE STATE NORMAL SCHOOL, AT WESTFIELD, MASS.



PLAN OF STATE NORMAL SCHOOL AT WESTFIELD, MASS.—The main edifice is 60 by 40 feet, not including porticoes. The wings are 25 by 38 feet each. A, A, Entrance Hall. B, B, Dressing-Rooms. C, Wash Room. D, D, Closets. E, Chemical Laboratory. F, Pneumatic Closets. G, Closet for Chemical Apparatus. H, H, H, H, Rest-
 tion Rooms. I, Teachers' Room. J, Room for Philosophical Apparatus. K, Principal School-Room. L, L, Balcony.

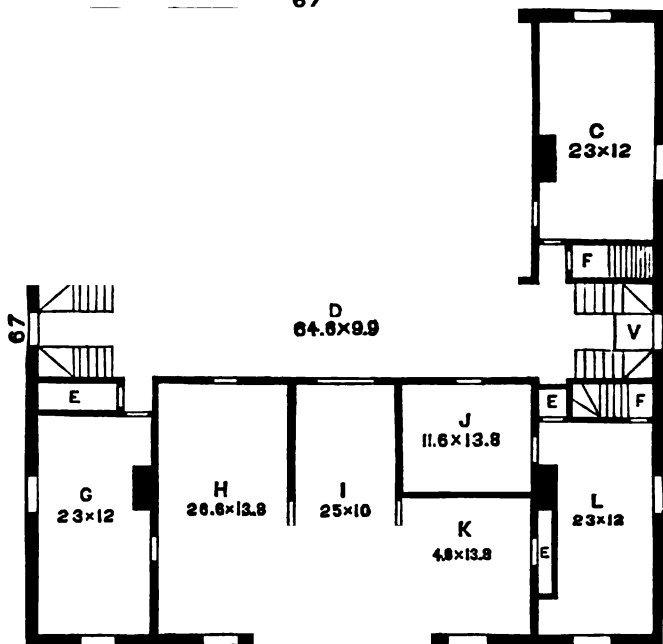


Fig. 1.—FIRST FLOOR.

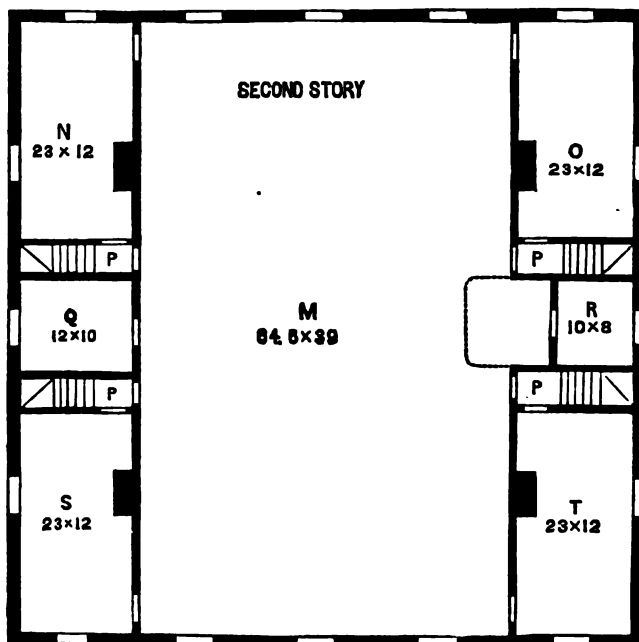


Fig. 2.—SECOND FLOOR.

THE PHILOSOPHY AND METHOD OF TEACHING

PURSUED AT THE WESTFIELD STATE NORMAL SCHOOL.

BY J. W. DICKINSON, A. M., PRINCIPAL.

1. THE PHILOSOPHY OF TEACHING.

If the mind is led to act in accordance with the laws of its nature, it will acquire the inclination and the ability to obey these laws. That state of the mind in which it has the inclination and the ability to obey the laws of its nature, is called Education; and the mind possessing this state, is said to be educated.

This definition of Education makes it a state of the mind and not a process. There is but one process by which the mind can be changed from one state to another, and that process is found in the mind's own activity.

By mental activity, knowledge is acquired, and the knowledge in turn excites activity, but it is activity only that produces a change in the powers that act.

As knowledge is both the product and the occasion of mental activity, knowledge seems to combine with mental activity in producing the state called Education.

That which produces a thing is the cause of that thing; then the cause of education is knowledge and mental activity. The cause of education is also called Instruction.

The term Instruction is sometimes used to signify knowledge, and sometimes to signify the process by which the teacher leads his pupils to acquire knowledge.

The word Instruction means to build within, and may well be limited in its application to mental activity and knowledge, which we have shown build up to perfection the mind itself.

It is the duty of the teacher to present in a right manner to the mind, objects and subjects which he desires to be the occasion of mental activity and knowledge.

The process of presenting occasions is Teaching.

The relations that Education, Instruction, and Teaching, hold to one another, are these: Instruction is the cause of Education, and Teaching is the occasion of Instruction.

Teaching must have for its object one of two ends, Knowledge or Education.

Knowledge as an end is valueless; then, the end towards which all intelligent teaching directs its attention, is Education.

If Education is the end the teacher should lead his pupil to attain, and if mental activity is the primary cause of Education, the teacher must provide right occasions for a complete and perfect mental activity. The ability to do this implies a knowledge of the ways in which the mind acts.

The modes, or ways of mental action, are three; thinking, feeling and choosing.

The mind thinking is called the Intellect: the mind feeling is called the Sensibilities; the mind choosing is called the Will.

The activity of the sensibilities is the result of thinking; the activity of the will is the result of feeling,—therefore, the teacher turns his attention primarily to the activity of the Intellect.

Every Intellectual act is an act of comparison.

The Intellect compares for perceptions, for general notions, for judgments, and for reasoning.

The teacher must present to the minds of the pupils, as occasions for these different acts of comparison, subjects and objects, named in proper order, for a *course of study*.

The course of study is divided into two courses: the one being an Elementary, the other a Scientific course.

In the Elementary course, the mind is excited to activity in acquiring a knowledge of facts.

This knowledge of facts is to be used as the occasion of Scientific knowledge.

A complete and perfect course of study, will name objects and subjects sufficient in number, and of the right kind, to guide the teacher in presenting occasions to the minds of his pupils, for making all kinds of comparisons; for comparing all kinds of objects; for comparing all kinds of relations, and for making the comparisons in the order, and in the manner required by the mind, as its powers are developed.

These are the principles which constitute the philosophy of teaching.

2. MODE OF TEACHING.

There are two ways of teaching. One way consists in presenting objects and subjects first as wholes, for general knowledge, then the parts and their relations for particular knowledge. The other way consists in first presenting parts of things, and the relations of the parts, for particular knowledge, then the whole made up of these parts and of their relations, for general knowledge.

These two ways of teaching are called Modes, or Methods. The first method is called the Analytic, the second the Synthetic method.

A synthetic method of study is impossible; as a method of teaching it is faulty for two reasons:

1st. The application of the method requires the teacher to present as occasions for mental activity and knowledge, parts of wholes, not as parts, but as independent individual things, that are not seen to hold any rela-

tion to the wholes of which they are parts, until the relation has been established by the teacher.

2d. The method requires the teacher to do the work that belongs to the student.

The application of the Analytic method requires the teacher to assign lessons for study, by the use of topics made out according to the following rules:

1st. The objects and subjects to be presented for study, should be of such a kind as are adapted to call into exercise the powers of the mind in accordance with the time and order of the development of these powers.

2d. The first topics assigned should be those that lead the pupil to study for Elementary knowledge.

3d. The first topic in any study should require the pupil to search for a general knowledge of the object or subject of study.

4th. The minor topics should present the parts of objects in a natural order, and of subjects in a logical order, and require the pupil to study for particular knowledge.

5th. The topics should lead the pupil to exhaust the subject.

Language is not to be considered the primary source of knowledge, but the mind is to be made conscious of having the ideas and thoughts to be expressed by the language used, before the language is employed.

This is done by actually bringing into the presence of the mind the object of study.

It is the duty of the teacher to excite the minds of his pupils to such mental activity as will lead to the state called Education, by bringing into their presence, in a right manner, the thing to be studied, and by guiding them to a knowledge of the facts and truths he would have them know.

All lessons are to be taught orally by the teacher, in such a manner that he will do nothing except furnish an occasion for knowledge.

The pupil should acquire the knowledge by his own mental activity.

The lesson thus taught will furnish for the pupil topics properly arranged for study, and a knowledge of the topics sufficient to enable him to continue to study them intelligently and profitably.

Text-books may be put into the hands of the pupils to be used as reference books. As text-books are sometimes used, they take away the possibility of independent mental activity on the part of both teacher and pupil.

The pupil having prepared his lesson, is to recite before the class upon the topic or topics, assigned at the time by the teacher.

He is to develop, without questions by the teacher, the topics assigned him, illustrating carefully the ideas and thoughts he expresses in words, before the expressions are made, observing to follow the same Analytic method in recitation that was observed by the teacher in assigning the topics, and by himself in studying them.

Both the teacher and the class are to observe carefully the pupil reciting, with reference to his knowledge, and his mode of teaching or reciting.

After the pupil has completed his recitation, the teacher and pupils may make criticisms, for the purpose of correcting mistakes, and for calling attention to new truth.

The pupil should be permitted, and even required, to use his active powers in obtaining knowledge, as well as his passive powers in receiving it.

The teacher should be constantly aware of the nature of his work, and of the end to be secured, and of the relation the means he employs holds to that end.

Successful teaching implies the existence of a course of study that is adapted to the wants of the mind as its powers are developed. It requires the employment of the right method in applying this course, and the presence of a teacher who understands the philosophy of his work.

The teacher must be supplied with all external means necessary for his teaching, and with the cordial sympathy of all in authority over him, and then he can so apply his philosophical method as to obtain a better and higher result than the schools have yet known.

STATE NORMAL SCHOOL.

AT BRIDGEWATER, MASS.

THE NORMAL SCHOOL AT BRIDGEWATER went into operation on the 9th of September, 1840, with 28 pupils. Up to August, 1846, pupils were received for two terms, which were not necessarily successive. Since that time they have been required to remain three successive terms of fourteen weeks each. In 1855, the period of attendance at all the State Normal Schools was fixed at one year and a half. This school receives both male and female pupils.

The following communication from Prof. Marshall Conant, the present Principal, sets forth the existing regulations respecting the admission of pupils, course of study, and other particulars.

Males must be at least seventeen years of age, and females at least sixteen.

Each candidate for membership is required to present a certificate of good MORAL CHARACTER, from some responsible person; and must pass a satisfactory examination in the common branches, viz.,—Reading, Spelling, Defining, Arithmetic, Writing, Grammar and Geography.

There is also required of the candidate a pledge to remain in the institution three consecutive terms, and faithfully to observe all its rules and regulations. If, however, the candidate is found to be qualified to enter advanced classes, his connection with the institution may be for a less time; but not less than one year.

The school year is divided into two terms: one beginning on the third Wednesday of March, and continuing 19 weeks; the other on the third Wednesday of September, and continuing 21 weeks. Annual session of the school, 40 weeks.

Pupils are received at the commencement of each term.

All candidates for admission are required to present themselves at the school room at 9 o'clock, A. M., of the *first day* of the term; for only in *very special* cases is any one *entitled* to an examination for admission *after* that day.

Tuition is gratuitous to those who design to become Teachers in the Public Schools of the State. To those from *other* States, who do not become Teachers in *this*, a fee of \$10 per term is charged for tuition; and the same also to those who enter the institution for the purpose of qualifying themselves to teach in Private Schools. A like amount for tuition is expected to be paid by those who fail to fulfill an expressed design to teach in the Public Schools of the State.

The State appropriates \$1000 a year for each of the Normal Schools, to aid those of its own students who find it difficult to meet the expense of attending one of those institutions without assistance. This aid is not granted during the first thirteen weeks of the course. Afterward, applicants for aid may expect to receive it as follows: those who reside not over twenty miles from the school, 50 cts. per week; those residing between 20 and 30 miles, \$1; and those over 30 miles, \$1.50 per week. If, however, the number of applicants in any term should be greater than to allow of these rates of distribution from the regular appropriation for the term, that amount will be distributed in the *proportion* of these rates.

Board is usually \$2.50 per week; exclusive of fuel and lights. And \$1.50 is required of every student, at the middle of each term, to meet incidental expenses.

It is also expected that every student will furnish himself with a copy of Lippincott's Gazetteer, and with one or two other smaller works; the whole expense of which may amount to \$7.00. All other ~~text~~-books are furnished to the students free of charge

The following table exhibits the course of studies pursued in the school, during the required time of connection with it, viz., one year and a half.

The pupils are divided into three classes; the Junior, Middle, and Senior.

The studies for the First Term, or Junior Class, stand upon the left of the table, next to the column of Hours, &c.; those for the Second Term, or Middle Class, occupy the next column to the right; those for the Third Term, or Senior Class, are placed upon the extreme right.

The table shows at a glance what are the particular studies for any part of the course, together with the days and hours of recitation.

The arrangements of the school are such that, besides pursuing this course of studies, the pupils are employed at times in giving instruction. This affords the principal and his assistants the opportunity of rendering the pupils more efficient aid in the application of principles, and the illustration of methods.

A course of lectures on Physical Geography is annually given in the school, in the month of December, by Prof Guyot; also a course on Chemistry, by some other professor.

TABLE.—Plan of Study and Instruction in the State Normal School, at Bridgewater, Mass.

MORNING.									
MONDAY AND FRIDAY.									
9	to	9-14	Devotional Exercises.						
9-14	to	10-10	Juniors.	Arithmetic.	Mid. Class.	Arithmetic.	Seniors.	American History.	
10-14	to	11		1st Latin.		2d Latin.		3d Latin.	
11-14	to	12		Algebra.		Algebra.		Polit. Class Book or Const. U S	
TUESDAY AND THURSDAY.									
9	to	9-14	Devotional Exercises.						
9-14	to	10-12	Juniors.	Geometry.	M. Class.	Nat. Philos.	Seniors.	Trigonometry and Optics.	
10-14	to	12		Arithmetic.		Arithmetic.		Astronomy.	
WEDNESDAY.									
8-1-2	to	8-3-4	Devotional Exercises.						
8-3-4	to	9-1-2	Physiology.			Logic.	Rhetoric		
9-35	to	10-35	Compositions						
10-45	to	12	Music.						
SATURDAY.									
8-1-2	to	8-3-4	Devotional Exercises.						
8-3-4	to	9-1-2	Juniors.	Physiology.	Mid. Class.	Logic.	Seniors.	Rhetoric.	
9-35	to	10-35		Algebra.		Algebra.		Geology and Natural History	
10-45	to	11-40		Grammar.		Grammar.		Grammar.	
11-45	to	12	Moral Philosophy and Duties.						
AFTERNOON.									
2*	to	2-10	Writing and Spelling every P. M.						
MONDAY AND THURSDAY.									
9-10	to	3	Juniors.	Reading.	Mid. Class.	Reading.	Seniors.	Book Keeping.	
3-5	to	3-4		Grammar.		Grammar.		Grammar.	
4	to	4-3-4		Geography.		Geography.		Geography or Indust. Drawing.	
TUESDAY AND FRIDAY.									
9-10	to	3	Juniors.	Reading.	Mid. Class.	Reading.	Seniors.	Reading.	
3-5	to	3-4		Ment. Arith.		Eng. Lan.		Theory of Teach. & Sch Laws	
4	to	4-3-4		Geography.		Geography.		Surveying and Drawing.	
4-3-4	to	5	General Exercises every P. M.						

There have been 1035 pupils, viz., 424 males and 611 females, connected with the school since its opening; of which number, 706 have completed the course of study.

* These are the hours for the Summer Term, those for the Winter Term are a half hour earlier.

STATE NORMAL SCHOOL AT BRIDGEWATER.



In 1861 the Legislature appropriated the sum of \$4,500 to the enlargement and repairs of the building. By this means the building originally 63 feet long by 41 feet wide, and two stories high, was enlarged by the addition of two wings, each 38 feet long and 24 feet wide, projecting from the center of the main edifice, and of the same height. Upon the lower floor are four convenient recitation rooms, two rooms, one for philosophical and the other for chemical apparatus, one room for mineralogical and geological specimens, and two ante-rooms for the pupils. In the second story, the whole of the original structure is devoted to a common school-room, which is 62 feet long by 40 feet wide, with a large recitation room opening from it into one of the wings, and a large library and reading room into the other wing.

By a subsequent appropriation new furniture has been supplied, the warming and ventilation of the entire building improved, and the grounds graded and securely inclosed.

The Visitors of this school in their report for 1865 report the following statistics:—

Number admitted since September 9, 1840, to September, 1865,....	1,499
“ of graduates to September, 1865,.....	956
“ in attendance in 1864-65,.....	122
“ graduated in 1865,.....	22

The course of study now embraces four terms or two years. The Principal expresses a desire for additional assistance “that the quality of our teaching may be improved by reducing the amount, for which the teacher could make more thorough preparation.”

REMARKS

AT THE DEDICATION OF THE STATE NORMAL SCHOOL-HOUSE
AT BRIDGEWATER.

August 19, 1846.

THE completion of a new edifice to accommodate the State Normal School at Bridgewater was signalized by appropriate exercises, on the 19th of August, 1846. Addresses were made during the day by His Excellency, Governor Briggs, Hon. William G. Bates, of Westfield, Amasa Walker, Esq., of Brookfield, at the church, and in the new school-room. After these addresses the company partook of a collation in the Town Hall, on which occasion the health of the Secretary of the Board of Education was given by the president of the day, and received by the company with enthusiastic applause. To this sentiment Mr. Mann responded as follows, as reported in the Boston Mercantile Journal.

Mr. President: Among all the lights and shadows that have ever crossed my path, this day's radiance is the brightest. Two years ago, I would have been willing to compromise for ten years' work, as hard as any I had ever performed, to have been insured that, at the end of that period, I should see what our eyes this day behold. We now witness the completion of a new and beautiful Normal School-house for the State Normal School at Bridgewater. One fortnight from to-morrow, another house, as beautiful as this, is to be dedicated at Westfield, for the State Normal School at that place. West Newton was already provided for by private munificence. Each Normal School then will occupy a house, neat, commodious, and well adapted to its wants; and the Principals of the schools will be relieved from the annoyance of keeping a Normal School in an *ad-hoc* Normal house.

I shall not even advert to the painful causes which have hastened this most desirable consummation,—since what was meant for evil has resulted in so much good. Let me, however, say to you, as the moral of this result, that it strengthens in my own mind what I have always felt; and I hope it will strengthen, or create, in all *your* minds, a repugnance to that sickly and cowardly sentiment of the poet, which made him long

“For a lodge in some vast wilderness,
Some boundless contiguity of shade,
Where rumor of oppression and deceit,
Of unsuccessful or successful wars,
Might never reach him more.”

There is oppression in the world which almost crushes the life out of humanity. There is deceit, which not only envenoms the unwary, but almost abolishes the security, and confidence, and delight, which rational and social beings ought to enjoy in their intercourse with each other. There are wars, and the question whether they are right or wrong tortures the good man a thousand times more than any successes or defeats of either belligerent. But the feeling which springs up spontaneously in my mind, and which I hope springs up spontaneously in your minds, my friends, in view of the errors, and calamities, and iniquities of the race, is, *not* to flee from the world, but to remain in it; *not* to hie away to forest solitudes or hermit cells, but to confront selfishness, and wickedness, and ignorance, at whatever personal peril, and to subdue and extirpate them, or to die in the attempt. Had it not been for a feeling like this among your friends, and the friends of the sacred cause of education in which you have enlisted, you well know that the Normal Schools of Massachusetts would have been put down, and that this day never would have shone to gladden our hearts and to reward our

toils and sacrifices. Let no man who knows not what has been suffered, what has been borne and forborne, to bring to pass the present event, accuse me of an extravagance of joy.

Mr. President, I consider this event as marking an era in the progress of education,—which, as we all know, is the progress of civilization,—on this western continent and throughout the world. It is the completion of the first Normal School-house ever erected in Massachusetts,—in the Union,—in this hemisphere. It belongs to that class of events which may happen once, but are incapable of being repeated.

I believe Normal Schools to be a new instrumentality in the advancement of the race. I believe that, without them, Free Schools themselves would be shorn of their strength and their healing power, and would at length become mere charity schools, and thus die out in fact and in form. Neither the art of printing, nor the trial by jury, nor a free press, nor free suffrage, can long exist, to any beneficial and salutary purpose, without schools for the training of teachers; for, if the character and qualifications of teachers be allowed to degenerate, the Free Schools will become pauper schools, and the pauper schools will produce pauper souls, and the free press will become a false and licentious press, and ignorant voters will become venal voters, and through the medium and guise of republican forms, an oligarchy of profligate and flagitious men will govern the land; nay, the universal diffusion and ultimate triumph of all-glorious Christianity itself must await the time when knowledge shall be diffused among men through the instrumentality of good schools. Coiled up in this institution, as in a spring, there is a vigor whose uncoiling may wheel the spheres.

But this occasion brings to mind the past history of these schools, not less than it awakens our hopes and convinces our judgment respecting their future success.

I hold, sir, in my hand, a paper, which contains the origin, the source, the *punctum saliens*, of the Normal Schools of Massachusetts. [Here Mr. Mann read a note from the Hon. Edmund Dwight, dated March 10th, 1838, authorizing him, Mr. Mann, to say to the Legislature, that the sum of ten thousand dollars would be given by an individual for the preparation of teachers of Common Schools, provided the Legislature would give an equal sum. The reading was received with great applause.]

It will be observed, resumed Mr. Mann, that this note refers to a conversation held on the evening previous to its date. The time, the spot, the words of that conversation can never be erased from my soul. This day, triumphant over the past, auspicious for the future, then rose to my sight. By the auroral light of hope, I saw company after company go forth from the bosom of these institutions, like angel ministers, to spread abroad, over waste spiritual realms, the power of knowledge and the delights of virtue. Thank God, the enemies who have since risen up to oppose and malign us, did not cast their hideous shadows across that beautiful scene.

The proposition made to the Legislature was accepted, almost without opposition, in both branches; and on the third day of July, 1839, the first Normal School, consisting of only *three* pupils, was opened at Lexington, under the care of a gentleman who now sits before me,—Mr. Cyrus Pierce, of Nantucket,—then of island, but now of continental fame.

[This called forth great cheering, and Mr. Mann said he should sit down to give Mr. Pierce an opportunity to respond. Mr. Pierce arose under great embarrassment; starting at the sound of his name, and half doubting whether the eloquent Secretary had not intended to name some other person. He soon recovered, however, and in a very happy manner extricated himself from the "fix" in which the Secretary had placed him. He spoke of his children, the pupils of the first Normal School, and of the honorable competition which ought to exist between the several schools; and to the surprise, as well as regret, of all who heard him, he spoke of being admonished by infirmities which he could not mistake, that it was time for him to retire from the profession. The audience felt as if, for once in his life, this excellent teacher had threatened to do wrong. He then told an amusing anecdote of a professor who retained his office too long, and was teased by the students in the words of Dr. Watts.—"The Rev. Dr. —, Hush, my babe, lie still and slumber." And then he sat down amidst the sincere plaudits of the company, who seemed to think he was not "so plaguy old" as he wished to appear.]

I say, said Mr. Mann, on resuming, that, though the average number of Mr. Pierce's school is now from sixty to eighty; and though this school, at the present term, consists of one hundred pupils, yet the first term of the first school opened with *three* pupils only. The truth is, though it may seem a paradox to

say so, the Normal Schools had to come to prepare a way for themselves, and to show, by practical demonstration, what they were able to accomplish. Like Christianity itself, had they waited till the world at large called for them, or was ready to receive them, they would never have come.

In September, 1839, two other Normal Schools were established: one at Barra, in the county of Worcester, since removed to Westfield, in the county of Hampden; and the other at this place, whose only removal has been a constant moving onward and upward, to higher and higher degrees of prosperity and usefulness.

In tracing down the history of these schools to the present time, I prefer to bring into view, rather the agencies that have helped, than the obstacles which have opposed them.

I say, then, that I believe Massachusetts to have been the only State in the Union where Normal Schools could have been established; or where, if established, they would have been allowed to continue. At the time they were established, five or six thousand teachers were annually engaged in our Common Schools; and probably nearly as many more were looking forward to the same occupation. These incumbents and expectants, together with their families and circles of relatives and acquaintances, would probably have constituted the greater portion of active influence on school affairs in the State; and had they, as a body, yielded to the invidious appeals that were made to them by a few agents and emissaries of evil, they might have extinguished the Normal Schools, as a whirlwind puts out a taper. I honor the great body of Common School teachers in Massachusetts for the magnanimity they have displayed on this subject. I know that many of them have said, almost in so many words, and, what is nobler, they have acted as they have said:—"We are conscious of our deficiencies; we are grateful for any means that will supply them,—nay, we are ready to retire from our places when better teachers can be found to fill them. We derive, it is true, our daily bread from school-keeping, but it is better that our bodies should be pinched with hunger than that the souls of children should starve for want of mental nourishment; and we should be unworthy of the husks which the swine do eat, if we could prefer our own emolument or comfort to the intellectual and moral culture of the rising generation. We give you our hand and our heart for the glorious work of improving the schools of Massachusetts, while we scorn the baseness of the men who would appeal to our love of gain, or of ease, to seduce us from the path of duty." This statement does no more than justice to the noble conduct of the great body of teachers in Massachusetts. To be sure, there always have been some who have opposed the Normal Schools, and who will, probably, continue to oppose them as long as they live, lest they themselves should be superseded by a class of competent teachers. These are they who would arrest education where it is; because they cannot keep up with it, or overtake it in its onward progress. But the wheels of education are rolling on, and they who will not go with them must go under them.

The Normal Schools were supposed by some to stand in an antagonistic relation to academies and select schools; and some teachers of academies and select schools have opposed them. They declare that they can make as good teachers as Normal Schools can. But, sir, academies and select schools have existed in this State, in great numbers, for more than half a century. A generation of school-teachers does not last, at the extent, more than three or four years; so that a dozen generations of teachers have passed through our Public Schools within the last fifty years. Now, if the academies and high schools can supply an adequate number of school-teachers, why have they not done it! We have waited half a century for them. Let them not complain of us, because we are unwilling to wait half a century more. Academies are good in their place; colleges are good in their place. Both have done invaluable service to the cause of education. The standard of intelligence is vastly higher now than it would have been without their aid; but they have not provided a sufficiency of competent teachers; and if they perform their appropriate duties hereafter, as they have done heretofore, they cannot supply them; and I cannot forbear, Mr. President, to express my firm conviction, that if the work is to be left in their hands, we never can have a supply of competent teachers for our Common Schools, without a perpetual Pentecost of miraculous endowments.

But if any teacher of an academy had a right to be jealous of the Normal Schools, it was a gentleman now before me, who, at the time when the Bridgewater Normal School came into his town, and planted itself by the path which led to his door, and offered to teach gratuitously such of the young men and women attending his school, as had proposed to become teachers of Common Schools, instead of opposing it, acted with a high and magnanimous regard to the great interests of humanity. So far from opposing, he gave his voice, his vote, and his purse, for the establishment of the school, whose benefits, you, my young friends, have since enjoyed. (Great applause.) Don't applaud yet, said Mr. Mann, for I have better things to tell of him than this. In the winter session of the Legislature of 1840, it is well known that a powerful attack was made, in the House of Representatives, upon the Board of Education, the Normal Schools, and all the improvements which had then been commenced, and which have since produced such beneficent and abundant fruits. It was proposed to abolish the Board of Education, and to go back to the condition of things in 1837. It was proposed to abolish the Normal Schools, and to throw back with indignity, into the hands of Mr. Dwight, the money he had given for their support.

That attack combined all the elements of opposition which selfishness and intolerance had created,—whether latent or patent. It availed itself of the argument of expense. It appealed invidiously to the pride of teachers. It menaced Prussian despotism as the natural consequence of imitating Prussia in preparing teachers for schools. It fomented political partisanship. It invoked religious bigotry. It united them all into one phalanx, animated by various motives, but intent upon a single object. The gentleman to whom I have referred was then a member of the House of Representatives, and Chairman of the Committee on Education, and he, in company with Mr. Thomas A. Greene, of New Bedford, made a minority report, and during the debate which followed, he defended the Board of Education so ably, and vindicated the necessity of Normal Schools and other improvements so convincingly, that their adversaries were foiled, and these institutions were saved. The gentleman to whom I refer is the Hon. JOHN A. SHAW, now Superintendent of schools in New Orleans.

[Prolonged cheers;—and the pause made by Mr. Mann, afforded an opportunity to Mr. Shaw, in his modest and unpretending manner, to disclaim the active and efficient agency which he had had in rescuing the Normal Schools from destruction before they had had an opportunity to commend themselves to the public by their works;—but all this only increased the animation of the company, who appeared never before to have had a chance to pay off any portion of their debt of gratitude. After silence was restored, Mr. Shaw said that every passing year enforced upon him the lesson of the importance and value of experience in school-keeping. Long as he had taught, he felt himself improved by the teachings of observation and practice; and he must therefore express his joy and gratitude at the establishment and the prosperity of the school at that place, whatever might be the personal consequences to himself.]

Nor, continued Mr. Mann, is this the only instance of noble and generous conduct which we are bound this day to acknowledge. I see before me a gentleman who, though occupying a station in the educational world far above any of the calamities or the vicissitudes that can befall the Common Schools,—though, pecuniarily considered, it is a matter of entire indifference to him whether the Common Schools flourish or decline,—yet, from the beginning, and especially in the crisis to which I have just adverted, came to our rescue, and gave all his influence, as a citizen and as a teacher, to the promotion of our cause; and whom those who may resort hither, from year to year, so long as this building shall stand, will have occasion to remember, not only with warm emotions of the heart, but, during the wintry season of the year, with warm sensations of the body also.* I refer to Mr. GEO. B. EMERSON.

[Mr. Emerson was now warmly cheered, until he rose, and in a heartfelt address of a few moments, expressed his interest in the school, and in the cause of education, which he begged the young teachers not to consider as limited to this imperfect stage of our being.]

These, said Mr. Mann, are some of the incidents of our early history. The late events which have resulted in the generous donations of individuals, and in the patronage of the Legislature, for the erection of this, and another edifice at West-field, as a residence and a home for the Normal Schools,—these events, I shall

* Mr. Emerson has furnished, at his own expense, the furnace by which the new school-house is to be warmed.

consult my own feelings, and perhaps I may add, the dignity and forbearance which belong to a day of triumph, in passing by without remark.

[This part of the history, however, was not allowed to be lost. As soon as the Secretary had taken his seat, the Rev. Mr. Waterston, who had been instrumental in getting up the subscription to erect the two school-houses, arose, and eloquently completed the history. He stated, in brief, that the idea of providing suitable buildings for the Normal Schools originated with some thirty or forty friends of popular education, who, without distinction of sect or party, had met, in Boston, in the winter of 1844-5, to express their sympathy with Mr. Mann in the vexatious conflict which he had so successfully maintained; and who desired, in some suitable way, to express their approbation of his course in the conduct of the great and difficult work of reforming our Common Schools. At this meeting, it was at first proposed to bestow upon Mr. Mann some token evincive of the personal and public regard of its members; but, at a subsequent meeting, it was suggested that it would be far more grateful and acceptable to him to furnish some substantial and efficient aid in carrying forward the great work in which he had engaged, and in removing those obstacles and hinderances both to his own success and to the progress of the cause, which nothing but an expenditure of money could effect. No way seemed so well adapted to this purpose as the placing of the Normal Schools upon a firm and lasting basis, by furnishing them with suitable and permanent buildings; and the persons present thereupon pledged themselves to furnish \$5000, and to ask the Legislature to furnish a like sum for this important purpose. The grant was cheerfully made by the Legislature, whose good-will has since been further expressed by a liberal grant, to meet the expenses of those temporary Normal Schools, called Teachers' Institutes. Mr. Mann, who had not yet taken his seat, then continued as follows:]

I have, my young friends, former and present pupils of the school, but a single word more to say to you on this occasion. It is a word of caution and admonition. You have enjoyed, or are enjoying, advantages superior to most of those engaged in our Common Schools. Never pride yourselves upon these advantages. Think of them often, but always as motives to greater diligence and exertion, not as points of superiority. As you go forth, after having enjoyed the bounty of the State, you will probably be subjected to a rigid examination. Submit to it without complaint. More will sometimes be demanded of you than is reasonable. Bear it meekly, and exhaust your time and strength in performing your duties, rather than in vindicating your rights. Be silent, even when you are misrepresented. Turn aside when opposed, rather than confront opposition with resistance. Bear and forbear, not defending yourselves, so much as trusting to your works to defend you. Yet, in counseling you thus, I would not be understood to be a total non-resistant,—a perfectly passive, non-elastic sand-bag, in society; but I would not have you resist until the blow be aimed, not so much at you, as, through you, at the sacred cause of human improvement, in which you are engaged,—a point at which forbearance would be allied to crime.

To the young ladies who are here—teachers and those who are preparing themselves to become teachers,—I would say, that, if there be any human being whom I ever envied, it is they. As I have seen them go, day after day, and month after month, with inexhaustible cheerfulness and gentleness, to their obscure, unobserved, and I might almost say, unrequited labors, I have thought that I would rather fill their place, than be one in the proudest triumphal procession that ever received the acclamations of a city, though I myself were the crowned victor of the ceremonies. May heaven forgive them for the only sin which, as I hope, they ever commit,—that of tempting me to break the commandment, by coveting the blissfulness and purity of their quiet and secluded virtues.

STATE NORMAL SCHOOL

AT SALEM, MASS.

HISTORY.

ON account of an earnest demand made by the people in the northeastern part of the State in 1853, the Board of Education recommended to the Legislature the establishment of a fourth Normal School, to be located in Essex County. In accordance with the recommendation, an appropriation of \$6,000 was promptly made. The advantages presented by the city of Salem for the accommodation of a State School were so manifest, and the liberality which the city extended to the school was so satisfactory, that the Board of Education determined to locate a Normal School for female teachers at Salem. The authorities of the city furnished a suitable lot of land, and erected thereon an acceptable and properly furnished building, at an expense of \$12,000 beyond the 6,000 appropriated by the State, and \$2,000 contributed to the enterprise by the Eastern Railroad Company. The building was dedicated with appropriate ceremonies, Sept. 14, 1854. Governor Washburn presided on the occasion, and a formal Address was delivered by Ex-Governor Geo. L. Boutwell.

The school opened under favorable auspices; sixty-two young ladies were admitted on the first day, and thirteen afterwards joined the class.

ORGANIZATION AND INSTRUCTION.

Candidates for admission must be at least sixteen years of age; must present a satisfactory certificate of good moral character; must declare their full intention of faithfully observing the regulations of the school, during their connection with it, and of afterwards teaching in the public schools of Massachusetts; and must pass a satisfactory examination in Geography, the History of the United States, and Algebra (through Equations of the First Degree with one unknown quantity).

Pupils are admitted from any State without charge for tuition, in case they declare their purpose to teach in the public schools of Massachusetts. Young ladies who intend to teach in private schools, or in other States, are allowed the privileges of the school on paying a tuition fee of \$30.00 a year.

To all pupils who propose to teach in the public schools of the State, tuition is free; and to all the members of the school, the requisite textbooks are, with few exceptions, furnished gratuitously. To defray incidental expenses, \$2.00 a term is paid by each pupil.

For the assistance of those who would find even the moderate expenses of the school burdensome, the Commonwealth makes an annual appro-

priation of a thousand dollars. One half of this amount is distributed at the close of each term, among pupils from Massachusetts who may merit and need the aid, in sums varying according to the distance of their residence from Salem, and their necessary expenses in attending the school, but not exceeding in any case \$1.50 per week. In this distribution, the first term of the pupil's connection with the school is not reckoned, unless she enters prepared to complete the prescribed course of study in less than two years.

Aid is also rendered, in case of special merit and need, from the income of a fund of five thousand dollars, for which the school is indebted to the munificent bequest of Nathaniel I. Bowditch, Esq., of Brookline.

School Terms—Studies.

The regular course of study, from the organization of the school down to 1865, occupied three terms of twenty weeks each, the terms at first beginning respectively, on the second Wednesday of March and the second Wednesday of September.

Commencing with 1865, the regular course of study has occupied two years, or four terms, each of twenty weeks. This change was made for the purpose of allowing more ample time for thorough instruction and training in the various subjects taught.

Advanced Class.

Ladies who have successfully completed the regular course of study, are allowed to remain in school and pursue a higher course. Former studies are carried on to a greater extent, and new studies, such as belong to a High School course, are introduced. Three terms were assigned to the course until 1866, when it was reduced to two terms.

Course of Study.

Some studies are attended to through the entire course, viz: Reading, Spelling, Etymologies, Rhetoric, English Composition, Mental Arithmetic, Drawing, (including pencil, crayon, and black-board drawing), Vocal Music, and Physical Culture.

In addition to the foregoing, the studies pursued during the successive terms, are as follows:

First Term. Arithmetic, Algebra, English Grammar, Geography of the Western Continent, History of the United States, Writing, (with especial reference to the way of teaching it), Anatomy and Physiology, and Chemistry.

Second Term. Arithmetic, Algebra, Geometry, English Language, (its History and Construction), Geography of the Eastern Continent, and Botany.

Third Term. Arithmetic, Algebra, Natural Philosophy, Mental Philosophy, English Literature, General History.

Fourth Term. Astronomy, Geology, Physical Geography, Mental Philosophy, Logic, Constitution of the United States, School Laws of

Massachusetts, and Principles and Methods of Teaching, and of School Management.

Optional Studies.

Soon after the commencement of each term, pupils who are able to do more than the work assigned in the regular course, are formed into special classes, in the French and Latin languages, attention being chiefly given to the modes of teaching those languages.

Advanced Course.

Graduates of the regular course are permitted to remain in the school one additional year. During this time they attend to the Higher Mathematics, (including Plane and Spherical Trigonometry), English Literature, Latin and French, and pursue to a greater extent some of the studies of the undergraduate course, especially Natural Philosophy and Chemistry.

Aims and Methods of Study and Training.

The ends aimed at in this school are chiefly two, viz: The acquisition of the necessary knowledge, and art of teaching.

From the beginning to the end of the course, all studies are conducted with especial reference to the best ways of teaching them. Recitations alone, however excellent, are not satisfactory, unless every pupil is able to teach others that which she has herself learned. In every study, the pupils in turn occupy temporarily the place of teacher of their classmates, and are subjected to their criticisms as well as those of the regular teacher. Teaching exercises of various kinds form a large and important part of the school work. During the Senior term, object lessons are daily given to classes of children from an adjacent primary school, so that every pupil obtains, before graduating, considerable experience in teaching young children to observe, think and give expression to thought.

Nearly all the studies are conducted upon the topical plan. Text-books are used chiefly as books of reference. Topics are assigned from day to day by the teacher, and the scholars are required to obtain the requisite knowledge from the various sources at command. The committing of text-books to memory is avoided as far as possible, the scholars being trained to depend upon thoughts rather than words.

The great object of the school is to make the pupils investigate, think and speak for themselves; to make them independent, self-reliant, and ready to meet whatever difficulties may arise.

Disciplina.

The discipline of the school is made as simple as possible. Pupils are expected to govern themselves; to do without compulsion what is required, and to refrain voluntarily from all improprieties. Those who are unwilling to conform cheerfully to the known wishes of the Principal and his Assistants, are presumed to be unfit to become teachers.

It is not deemed necessary to awaken a feeling of emulation in order to induce the scholars to perform their duties faithfully. The ranking of

scholars according to their comparative success in studies, is not here allowed. Faithful attention to duty is encouraged for its own sake, not for the purpose of obtaining certain marks of credit.

Promotions and Graduations.

Promotions from one class to another are made by means of an elaborate written examination at the close of each term. These examinations cover every study pursued during the term, and the result in each study must be satisfactory, to entitle the pupil to advance to the study next in order. A general failure on the part of a pupil compels her to retake the entire work of the term. In case of a partial failure, reexaminations are allowed.

In the Senior term, a special examination is had in all the branches taught in the common schools, and only those who pass it successfully are permitted to graduate.

Number of Pupils. Graduates.

The whole number of pupils in the School from its establishment in September, 1854, to July 1, 1867, is 1041. The whole number of graduates to the same date, is 453. The number present during the term ending at the latter date, was 149, the largest number present during any term.

PRINCIPALS

On the opening of the Normal School in 1854, Richard Edwards was appointed Principal. He resigned in 1854, to accept an appointment to the charge of the City Normal School of St. Louis. He left the latter place in 1862, to accept the Presidency of the Illinois Normal University. Alpheus Crosby, formerly Professor in Dartmouth College, was appointed Principal in 1857, and entered upon the duties in the school in October of that year. Prof. Crosby resigned in 1865, and Daniel P. Hagar, Principal of the High School in Jamaica Plains, was appointed his successor.

EXTRACT FROM AN ADDRESS

BY EX-GOVERNOR GEORGE S. BOUTWELL,

AT THE DEDICATION OF THE STATE NORMAL SCHOOL AT SALEM,

August 19th, 1854.

THE house you have erected is not so much dedicated to the School as to the public; the institution here set up is not so much for the benefit of the young men and women who may become pupils, as for the benefit of the public which they represent. The appeal is, therefore, to the public to furnish such pupils, in number and character, that the institution may soon successfully enter upon the work for which it is properly designed. But the character and value of this school depend on the quality of its teachers more than on all things else. They should be thoroughly instructed, not only in the branches taught, but in the art of teaching them. The teacher ought to have attained much that the pupil is yet to learn; if he has not, he can not utter words of encouragement, nor estimate the chances of success. It is not enough to know what is contained in the text-book; the pupil should know that at least; the teacher should know a great deal more. A person is not qualified for the office of teacher when he has mastered the contents of a book; and has, in fact, no right to instruct others until he has mastered the subject." Here then seems to be the gist of the whole matter. We in Maine have at length an opportunity to do something which may be made of great benefit to the public schools of the State, and, through them, to the cause of general good learning. This is to be done through the instrumentality of an institution—the Normal School. Very largely is this trust committed to the hands of the educational men of the present day among us. Future generations will hold us responsible for a right discharge of our duties. Let us not prove recreant to our sacred trust.

When that great educator, who has left a bright and ineffaceable record upon the annals of the present age, heard of his election as master of the School at Rugby, he wrote to Dr. Hawkins, whose recommendation, in which he expressed his belief that Arnold would revolutionize the system of public instruction in Europe—had done most towards securing his appointment, in the following touching words:

"I need not tell you how unexpected this result [my election] has been to me, and I hope I need not say also what a solemn and overwhelming responsibility is imposed upon me. I would hope to have the prayers of my friends, together with my own, for a supply of that true wisdom which is required for such a business." The position of a Normal School teacher is one of "solemn and overwhelming responsibility," and the person occupying it needs a wisdom that comes through communion with the Divine One. This institution, like the noble, the lamented Arnold, is nothing less than revolutionary in its relationship to the Common Schools. It will fail to accomplish its mission, or it will regenerate. It will give life, or it itself will die.

It remains to be said—if indeed that be necessary—that I believe with De Gasparin and De Tocqueville, that in the universality of common instruction is the true superiority of Americans: that I believe, with the leading patriots of my country, that republican institutions can not exist for any length of time except they be enshrined in the hearts of an intelligent, liberty-loving people; that to retain the true superiority of which we, as a nation, are acknowledged to be possessed, we must retain and improve its cause—the public school system; that I believe, with the lamented Mann and Page, the living Barnard, the patriotic and eloquent Everett, and a host of other eminent educators, that the Normal School is a necessity—a *sine qua non*—for the perfection of a system of instruction for the people; and lastly, and consequently, that I would give to

the Normal School its right to rank among the institutions which, as an harmonious whole, work for the preservation of American Freedom.

Let it not be thought, my friends, that I am an enthusiast in respect to the position which the Normal and the public school hold among the institutions of our nation, and the consequent glory of the profession of the popular educator. Here is a cause in which, surrounded by the safeguards of the Christian religion, one need not fear to be enthusiastic.

THE OFFICE OF THE PUBLIC SCHOOL TEACHER

Before the public school teachers of this nation, there is opening a future, which, like every other prospective view in the time in which we live, is at once solemn and cheering. It is cheering to believe that we may live to see the day when education for the people shall be as much prized in the South as in the North; that from the "one true seed of freedom" which the Pilgrims of 1620 were commissioned of the Almighty to plant upon these then benighted shores, has grown the Tree of Life, whose leaves are for the healing of the nation. But it is solemn—O, is it not intensely solemn!—to reflect that upon our shoulders is to be thrown so great responsibility; that not alone upon the field of battle, but more certainly upon the field of moral thought, are to be laid the firm foundations of a regenerated republican liberty! American citizenship is, and is to be a grander, loftier thing in the future than it has been in the past. Our baptism of blood is to do its work of purification; and, thus, looking with the vision of a poet of the motherland, we discerned through the gloomy days of battle, through the fierce conflict of our nation's heroic period, the dawn-breaking of a more comprehensive, more brilliant social illumination. We said with Tennyson:

"Tho' many a light shall darken, and many shall weep
For those that are crushed in the clash of jarring claims,
Yet God's just wrath shall be wreaked on a giant liar;
And many a darkness into the light shall leap,
And shine in the sudden making of splendid names,
And noble thought be freer under the sun,
And the heart of a people beat with one desire."

* * * * *
"Let it flame or fade, and the war roll down like a wind,
We have proved we have hearts in a cause; we are noble still,
And all have awaked, as it seems, to the better mind;
It is better to fight for the good than to rail at the ill."

The end of our conflict was not, when, with ringing of bells, with roar of deep-mouthed cannon, with bonfires and illuminations, with notes of praise, and with voice of silver-toned oratory, we celebrated the restoration of peace and union. For then came the necessity for the highest qualities of statesmanship, in State legislatures and a national Congress. And again, the end is not when the counsels of the statesman, under the blessings of Divine Providence, shall have settled the most complicated problems growing out of the present disjointed condition of our affairs. After all that, in the dim distant future, when you and I shall have acted well or ill our part upon the stage of life and shall sleep with the fathers of the Republic, the generations that will come will find a work high and glorious, made doubly sacred by the blood and prayers and tears of their predecessors.

The American citizen is to act a part in all this, and the American citizen is to be taught in youth in the public school. Will any one say that the position of a common school teacher is one of small account—will any gainsay his claim to a preparation for his professional duties at the expense of that people to whom his service is so important? True it is, as some one has said, "Let a people treat with scorn the defenders of its liberties, and invest them with the symbols of degradation, and it will soon have none to defend them." There is no more sure defense to republican liberty than the public school; there is no truer personal defender of American institutions than the schoolmaster. Treat him with scorn, invest him with the symbols of degradation if you dare. God may give him grace still to labor on, but it will be with a saddened heart—a life without an earthly ambition.

NEW YORK STATE NORMAL SCHOOL

AT ALBANY.

THE Normal School for the state of New York, was established by an act of the Legislature in 1844, "for the instruction and practice of Teachers of Common Schools, in the science of Education and the art of Teaching." It was first established for five years, as an experiment, and went into operation on the 18th of December, 1844, in a building provided gratuitously by the city of Albany, and temporarily fitted up for that purpose. In 1848, an act was passed by the Legislature "for the permanent establishment of the State Normal School," appropriating \$15,000 toward the erection of a suitable building. The following year an additional appropriation of \$10,000 was made for its completion. A large and commodious edifice, (See Fig. 1, 2, 3, 4, 5, 6,) containing a dwelling-house for the Principal, has accordingly been erected on the corner of Lodge and Howard streets, adjoining the State Geological and Agricultural Rooms. To this building the school was removed on the 31st of July, 1849. At the expiration of the term of five years for which this institution was originally established, and in connection with the closing exercises of the Summer

Session ending September 27, 1849, Samuel S. Randall, Esq., Deputy Superintendent of Common Schools, pronounced an address in which the origin and progress of the Normal School is thus graphically set forth :

For several years prior to 1844, the attention of the friends of Common School education in this state had been strongly directed to the inadequacy of the existing agencies for the preparation of duly qualified teachers for our elementary institutions of learning. Liberal endowments had, from time to time, during a long series of years, been bestowed upon the academies in different sections of the state, with a view to the attainment of this object ; but the practical inability of these institutions to supply the demand thus made upon them with all the resources at their command, soon became obvious and undeniable. The establishment of Normal Schools for this special and exclusive purpose in various portions of Europe, where popular education was most flourishing, and in the adjoining state of Massachusetts, long and honorably distinguished for her superior public and private schools, and the manifest tendency of these institutions to elevate and improve the qualifications and character of teachers, had begun to attract the regard of many of our most distinguished statesmen.

On a winter's afternoon, early in the year 1844, in a retired apartment of one of the public buildings in this city, might have been seen, in earnest and prolonged consultation, several eminent individuals whose names and services in the cause of education are now universally acknowledged. The elder of them was a man of striking and venerable appearance—of commanding intellect and benignant mien. By his side sat one in the prime and vigor of manhood, whose mental faculties had long been disciplined in the school of virtuous activity, and in every lineament of whose countenance appeared that resolute determination and moral power, which seldom fails to exert a wide influence upon the opinions and actions of men. The third in the group was a young man of slight frame and pale, thoughtful visage ; upon whose delicate and slender form premature debility had palpably set its seal ; yet whose opinions seemed to be listened to by his associates with the utmost deference and regard. The remaining figure was that of a well-known scholar and divine, whose potent and beneficial influence had long been felt in every department of the cause of popular education, and whose energy, activity and zeal had already accomplished many salutary and much needed reforms in our system of public instruction.

The subject of their consultation was the expediency and practicability of incorporating upon the Common School system of this state an efficient instrumentality for the education of teachers. The utility of such a measure, and its importance to the present and prospective interests of education, admitted, in the minds of these distinguished men, of no doubt. The sole question was whether the public mind was sufficiently prepared for its reception and adoption : whether an innovation so great and striking, and involving as it necessarily must a heavy and continued expenditure of the public money, might not be strenuously and successfully resisted : and whether a premature and unsuccessful attempt then to carry into execution a measure of such vital importance, might not be attended with a disastrous influence upon the future prospects of the cause of education. These considerations after being duly weighed, were unanimously set aside by the intrepid spirits then in council ; and it was determined that, backed by the strong and decided recommendation of the head of the Common School Department, immediate measures should be forthwith adopted for the establishment of a STATE NORMAL SCHOOL. The men who thus gave the first decided impetus to the great enterprise, whose gratifying results are now before us, were SAMUEL YOUNG, CALVIN T. HULBURD, FRANCIS DWIGHT, and ALONZO POTTER.

Mr. Hulburd, the able and enlightened Chairman of the Committee on Colleges, Academies and Common Schools, of the Assembly, visited the Normal Schools of Massachusetts, and after a thorough examination of their merits and practical operations, submitted an elaborate and eloquent report to the House, in favor of the immediate adoption of this principle in our system of public instruction. The bill introduced by him, and sustained in all its stages by his powerful influence and indefatigable exertions, and the cooperation of the most zealous friends of education throughout the state, became a law, and appropriated the sum of \$10,000 annually for five successive years, for the purpose of establishing and maintaining a State Normal School in this city. The general control of the Institution was committed to the Regents of the University, by whom an Executive Committee, consisting of five persons, one of whom was to be the Superintendent of Common Schools, was to be appointed, upon whom the direct management, discipline and course of instruction should devolve.

In pursuance of this provision, the Board of Regents, in June, 1844, appointed a Committee comprising the Hon. SAMUEL YOUNG, then Superintendent of Common Schools, the Rev. ALONZO POTTER, Rev. WM. H. CAMPBELL, Hon. GIDEON HAWLEY, and FRANCIS DWIGHT, Esq. This committee forthwith entered upon the execution of their responsible duties; procured on very liberal and favorable terms from the city of Albany the lease for five years of the spacious building in State street, recently occupied by the Institution; prescribed the necessary rules and regulations for the instruction, government and discipline of the school, the course of study to be pursued, the appointment and selection of the pupils, &c., and procured the services of the late lamented and distinguished Principal, then of Newburyport, Massachusetts, together with his colleague, Prof. Perkins, of Utica, the present Principal, as teachers. On the 18th day of December, 1844, the school was opened in the presence of a large concourse of citizens and strangers, by an eloquent address from Col. YOUNG, and by other appropriate and suitable exercises. Twenty-nine pupils, thirteen males and sixteen females, representing fourteen counties only, of both sexes were in attendance, who, after listening to a brief but clear and explicit declaration from Mr. PAGE, of his objects, views and wishes in the management and direction of the high duties devolved upon him, entered at once upon the course of studies prescribed for the school. Before the close of the first term on the 11th of March, 1845, the number of pupils had increased to ninety-eight, comprising about an equal number of each sex, and representing forty of the fifty-nine counties of the state. During this term the musical department of the school was placed under the charge of Prof. ILSLEY, of this city, and instruction in drawing was imparted by Prof. J. B. HOWARD, of Rensselaer.

On the commencement of the second term, on the 9th of April, 1845, 170 pupils were in attendance, comprising a nearly equal proportion of males and females, and representing every county in the state, with a single exception. Of these pupils about nine-tenths had been previously engaged in teaching during a longer or shorter period. The term closed on the 28th of August, with a public examination and other suitable exercises, and thirty-four of the students received the certificate of the Executive Committee and Board of Instruction, as in their judgment well qualified in all essential respects, to teach any of the Common Schools of the state.

On the 15th of October succeeding, the school re-opened with 180 pupils, which was increased during the progress of the term to 198 from every county in the state but one. The death of Mr. DWIGHT, which took place on the 15th of December, and the transfer of the Rev. Dr. POTTER to the Episcopal Diocese of Pennsylvania, created vacancies in

the Executive Committee, which were supplied by the appointment of the Hon. HARMANUS BLEECKER, and the Hon. SAMUEL YOUNG, the latter gentleman having been succeeded in the office of Superintendent of Common Schools by the Hon. N. S. BENTON, of Herkimer. The sudden death of Mr. Dwight, who had taken a deep interest in the prosperity and success of the Institution, and had given to its minutest details the benefits of his supervision and constant attention, cast a deep gloom upon the inmates; and the peculiar circumstances under which it took place were strikingly indicative of the vain and illusory nature of all human expectations. For several weeks previous to his death, Mr. Dwight had manifested much interest in devising appropriate means for the celebration of the opening of the school, on the 18th of December. Alas! how little could he imagine that the long line of Normal pupils, with the children of the various public schools of the city, to whom also he had been a signal benefactor, and hundreds of his fellow-citizens should, on that day, follow his lifeless remains to their long home!

At the close of the third term, March 18, 1846, a public examination was held, which continued during four successive days, and convinced all who felt an interest in the Institution, that the work of preparation for the teacher's life was, in all respects, thorough and complete. The diploma of the Institution was conferred on forty-seven graduates. During this and the preceding term a valuable addition had been made to the Board of Instruction, by promoting to the charge of several of the principal departments, those graduates of the Institution who now so ably and successfully preside over these departments. The Experimental School, organized at the commencement of the second term, was placed under the general supervision of its present teacher, and has proved an exceedingly valuable auxiliary in the practical preparation of the pupils of the principal school for the discharge of their duty as teachers. Two hundred and five pupils were in attendance at the commencement of the fourth term, on the first Monday of May, 1846, of whom sixty-three received a diploma at its close in September following. During the fifth term, commencing on the second of November, one hundred and seventy-eight pupils only appeared, forty-six of whom graduated in March, 1847. At the commencement, however, of the sixth term in May subsequently, two hundred and twenty-one pupils were in attendance, of whom sixty-four received the diploma of the Institution in September; and at the re-opening of the school in November, two hundred and five pupils appeared. Up to this period the number of names entered on the Register of the school as pupils, including those in attendance at the commencement of the seventh term, was seven hundred and thirty-seven. Of these two hundred and fifty-four had received their diploma as graduates, of which number two hundred and twenty-two were actually engaged in teaching in the Common Schools of the state; and the residue, with few exceptions, in the different academies or in private schools. Of those who had left the school without graduating, nearly all were engaged during a longer or shorter period in teaching in the several Common Schools.

And now came that dark and gloomy period when the hitherto brilliant prospects of the Institution were overcast with deep clouds of melancholy and despondency—when that noble form and towering intellect which, from the commencement of the great experiment in progress, had assiduously presided over and watched its development, was suddenly struck down by the relentless hand of the great destroyer—when the bereaved and stricken flock, deprived of their revered and beloved guide, teacher, friend, mournfully assembled in their accustomed halls on that dreary and desolate January day at the commencement of the year 1848, to pay the last sad obsequies to the remains of their departed Principal. In the prime and vigor of his high faculties—in the meridian brightness of his

lofty and noble career—in the maturity of his well-earned fame as “first among the foremost” of the teachers of America, he passed away from among us, and sought his eternal reward in that better land where the ills and the obstructions of mortality are forever unknown; where the emancipated spirit, freed from the clogs which here fetter its high action and retard its noblest development, expands its illimitable energies in the congenial atmosphere of infinite knowledge and infinite love. It is not for me, on the present occasion, to pronounce his eulogy, although I knew and loved him well. That has already been done by an abler hand, and it only remains to say that the impress which his masterly and well-trained mind left upon the Institution, the child of his most sanguine hopes and earnest efforts, and upon the interests of education generally throughout the state, of which he was the indefatigable promoter, has been of the most marked character, and will long consecrate his name and memory.

Since this period the progress of the Institution, under the auspices of its present enlightened Principal, and his devoted corps of assistants, has been uniformly onward and upward. At the close of the seventh term fifty pupils were graduated, and the eighth term opened with two hundred and eight, of whom forty-six received their diploma at its close. The ninth term opened on the first day of November last with one hundred and seventy-five pupils, and at its close forty-three were graduated; and the tenth term, which has now just closed, opened with upward of two hundred pupils, of whom thirty-six are now about to graduate.

The following account of the State Normal School is copied from the Annual Circular of the Executive Committee, for 1850:

“Each county in the state is entitled to send to the school a number of pupils, (either male or female,) equal to twice the number of members of the Assembly in such county. The pupils are appointed by the county and town superintendents at a meeting called by the county superintendent for that purpose. This meeting should be held and the appointment made at least two weeks before the commencement of each term, or as soon as information is received as to the number of vacancies. A list of the vacancies for each term will be published in the District School Journal, as early as the number of such vacancies can be ascertained, usually before the close of the former term.

Pupils once admitted to the school will have the right to remain until they graduate; unless they forfeit that right by voluntarily vacating their place, or by improper conduct.

Persons failing to receive appointments from their respective counties, should, after obtaining testimonials of a good moral character, present themselves the first day of the term, for examination by the Faculty. If such examination is satisfactory, they will receive an appointment from the Executive Committee, without regard to the particular county, provided any vacancies exist. In such case the pupil will receive mileage.

By an act of the Legislature, passed April 11, 1849, “every teacher shall be deemed a qualified teacher, who shall have in possession a Diploma from the State Normal School.”

QUALIFICATION OF APPLICANTS. Females sent to the school must be sixteen years of age, and males eighteen.

The superintendents, in making their appointments, are urged to pay no regard to the political opinions of applicants. The selections should be made with reference to the *moral worth* and abilities of the candidates. Decided preference ought to be given to those, who, in the judgment of the superintendents, give the highest promise of becoming the most efficient teachers of common schools. It is also desirable that those only

should be appointed who have already a good knowledge of the common branches of study, and *who intend to remain in the school until they graduate.*

ENTRANCE. All the pupils, on entering the school, are required to sign the following declaration:

We the subscribers hereby DECLARE, that it is our intention to devote ourselves to the business of teaching district schools, and that our sole object in resorting to this Normal School is the better to prepare ourselves for that important duty.

As this should be signed in good faith on the part of the pupils, they should be made acquainted with its import before they are appointed. It is expected of the superintendents, that they shall select such as will sacredly fulfill their engagements in this particular.

Pupils on entering the school are subjected to a thorough examination, and are classified according to their previous attainments. The time required to accomplish the course will depend upon the attainments and talents of the pupil, varying from *one to four terms.* *Very few, however, can expect to graduate in one term.*

PRIVILEGES OF THE PUPILS. All pupils receive their tuition free. They are also furnished with the use of text-books without charge; though if they already own the books of the course, they would do well to bring them, together with such other books for reference as they may possess. Moreover, they draw a small sum from the fund for the support of the school, to defray in part their expenses.

It is proposed to apportion the sum of \$1,700 among the 256 pupils, who may compose the school during the next term. 1. Each pupil shall receive three cents a mile on the distance from his county town to the city of Albany. 2. The remainder of the \$1,700 shall then be divided equally among the students in attendance.

The following list will show how much a student of each county will receive, during the ensuing term:

Albany, \$2.41; Allegany, \$10.09; Broome, \$6.76; Cattaraugus, \$11.17; Cayuga, \$7.09; Chautauque, \$12.49; Chemung, \$8.35; Chenango, \$5.41; Clinton, \$7.27; Columbia, \$3.28; Cortland, \$6.67; Delaware, \$4.72; Dutchess, \$4.66; Erie, \$10.93; Essex, \$6.19; Franklin, \$8.77; Fulton, \$3.76; Genesee, \$9.73; Greene, \$3.43; Hamilton, \$4.87; Herkimer, \$4.81; Jefferson, \$7.21; Kings, \$6.97; Lewis, \$6.28; Livingston, \$9.19; Madison, \$5.44; Monroe, \$8.98; Montgomery, \$3.61; New-York, \$6.85; Niagara, \$10.72; Oneida, \$5.29; Onondaga, \$6.40; Ontario, \$8.26; Orange, \$5.44; Orleans, \$10.12; Oswego, \$7.21; Otsego, \$4.39; Putnam, \$5.59; Queens, \$7.63; Rensselaer, \$2.59; Richmond, \$7.32; Rockland, \$6.07; Saratoga, \$4.78; Schenectady, \$2.86; Schoharie, \$3.07; Seneca, \$7.54; St. Lawrence, \$8.59; Steuben, \$8.89; Suffolk, \$9.16; Sullivan, \$5.80; Tioga, \$7.42; Tompkins, \$7.31; Ulster, \$4.15; Warren, \$4.27; Washington, \$3.85; Wayne, \$7.84; Westchester, \$6.46; Wyoming, \$9.85; Yates, \$7.96.

It is proper to state, that if the number of pupils is less than 256, the sum to be received will be proportionately increased. The above schedule shows, therefore, the minimum sum to be received by each pupil. His apportionment cannot be less than as above stated, and it may be more.

This money will be paid at the *close of the term.*

APPARATUS. A well assorted apparatus has been procured, sufficiently extensive to illustrate all the important principles in Natural Philosophy, Chemistry, and Human Physiology. Extraordinary facilities for the study of Physiology are afforded by the Museum of the Medical College, which is open at all hours for visitors.

LIBRARY. Besides an abundant supply of text-books upon all the branches of the course of study, a well selected miscellaneous library has been procured, to which all the pupils may have access free of charge. In the selection of this library, particular care has been exercised to procure most of the recent works upon Education, as well as several valuable standard works upon the Natural Sciences, History, Mathematics, &c. The State library is also freely accessible to all.

TERMS AND VACATIONS. The year is divided into two terms, so as to bring the vacations into April and October, the months for holding the Teachers' Institutes. This also enables the pupils to take advantage of the cheapness of traveling by the various means of water communication in the State, in going to and from the school.

The **SUMMER TERM** commences on the **FIRST MONDAY IN MAY**, and continues **TWENTY WEEKS**, with an intermission of one week from the first of July.

The **WINTER TERM** commences on the **FIRST MONDAY IN NOVEMBER**, and continues **TWENTY-TWO WEEKS**, with an intermission from Christmas to New Year's day inclusive.

PROMPT ATTENDANCE. As the school will open on Monday, it would be for the advantage of the pupils, if they should reach Albany by the Thursday or Friday preceding the day of opening. The Faculty can then aid them in securing suitable places for boarding.

As the examinations of the pupils preparatory for classification will commence on the first day of the term, it is exceedingly important that all the pupils should report themselves on the first morning. Those who arrive a day after the time, will subject not only the teachers to much trouble, but themselves also to the rigors of a private examination. After the first week, no student, except for the strongest reasons, shall be allowed to enter the school.

PRICE OF BOARD. The price of board in respectable families, varies from \$1.50 to \$2.00, exclusive of washing. Young gentlemen by taking a room and boarding themselves, have sustained themselves at a lower rate. This can better be done in the summer term.

The ladies and gentlemen are not allowed to board in the same families. Particular care is taken to be assured of the respectability of the families who propose to take boarders, before they are recommended to the pupils.

EXPERIMENTAL SCHOOL. Two spacious rooms in the building are appropriated to the accommodation of the two departments of this school. These two departments are under the immediate supervision of the Permanent Teacher, who is a graduate of the Normal School.

The object of this school is to afford each Normal Pupil an opportunity of practising the methods of instruction and discipline inculcated at the Normal School, as well as to ascertain his 'aptness to teach,' and to discharge the various other duties pertaining to the teacher's responsible office. Each member of the graduating class is required to spend at least two weeks in this department.

In the experimental School there are ninety-three pupils between the ages of six and sixteen years. **FIFTY-EIGHT** of these are free pupils. The free seats will be hereafter given exclusively to fatherless children, residing in the city of Albany. This is in consideration of an appropriation by the city to defray in part the expense of fitting up one of the rooms of the school. The remaining **THIRTY-FIVE** pupils are charged \$20 per year for tuition and use of books. This charge is made merely to defray the expense of sustaining the school."

1848 to 1863.

On the first of January, 1848, Prof. George R. Perkins, was appointed Principal of the New York State Normal School, to fill the vacancy occasioned by the death of the lamented Page, who, in his eminent success and early death, had realized either alternative of the injunction to "succeed or die," laid upon him by his friend Horace Mann, when he assumed the charge of the school. Prof. Perkins had been connected with the school since its organization. He was familiar with its workings, and the plans of Mr. Page, and his success in his department had evinced his fitness to carry the experiment of the State Normal School to a successful termination. The winter of 1852, was a crisis in its history. The appropriations for its support were made by the Legislature, annually. An occasion was thus furnished for narrow minded men to attack the system of Normal Schools, charging against it that it was unable to supply teachers to the State to such an extent as to warrant its continuance on grounds of public policy. So far were these attacks carried that formal notice was given in the Legislature of an intention to introduce a bill to repeal the law establishing the school. This, with the exception of a feeble opposition on the part of a single senator in the winter of 1858, was the last exhibition of legislative hostility. Some dissensions among the Faculty, greatly magnified, led to the appointment of a committee of inquiry in the Legislature to examine into its internal arrangements, and the general mode in which it was conducted. It was gratifying to the friends of the school that these movements failed to impair public confidence. This is clearly shown by the fact that the term which immediately succeeded them, had a larger attendance than any previous one. The severe and devoted labors of the Principal, in connection with the movements above alluded to, acting upon a constitution naturally sensitive, had so impaired his health, as to render his resignation necessary, to the deep regret of the friends of the school. The Executive Committee in their Annual Report to the Legislature, bear full testimony to his private worth and public services.

During the period of more than four years in which Prof. Perkins continued its Principal, the school enjoyed a good measure of success. The average number in attendance for each term was 216, and the whole number of graduates was 809, of whom, 146 were males, and 163 were females.

On the 20th of September, 1852, the position left vacant by the resignation of Prof. Perkins, was filled by the appointment of Samuel B. Woolworth, who for a period of twenty-two years, had been the honored Principal of one of the largest and most important Academies in the State. In this position he had fully earned the reputation of being one of the most popular, thorough, and successful educators in the country. In almost every state were men occupying high social and civil positions to whom he had given their early instructions and impulses, and whose success in life was in a great measure due to his influence. When therefore

the Executive Committee of the Normal School desired to make a selection of Principal for their Institution, they could not have labored under much embarrassment in making choice of the proper person. Upon the accession of Prof. Woolworth, some important changes were made in the organization of the school. The policy adopted soon after its commencement was to supply its teachers from among its graduates. While this policy contributed to give effect to the early plans on which the instruction was based, it failed to bring into its faculty the enlarged and liberal culture of minds trained under more rigid discipline and a wider range of study. To correct this defect, the Executive Committee resolved to establish the following professorships :

The English Language and Literature,
The Natural Sciences, and
Mathematics, pure and applied.

It was intended that those appointed to these Professorships should be thoroughly educated men, and that so far as practicable, the positions should be permanent. The influence of this plan has been most salutary. The appointments of subordinate teachers whose positions are regarded as less permanent, are still made from the graduates, so that incitements to effort for higher attainments and marked distinction, are presented to the pupils of the school.

During Dr. Woolworth's Principalship, the school seems to have been in the full tide of its prosperity. For the first time in its history, it was found necessary to dismiss those who had been appointed by the Executive Committee to fill vacancies to give room for those who had received regular appointments. The average number in attendance for each term, was 255, and the whole number of graduates was 288, of whom 198 were females, and 95 were males. In February, 1856, Dr. Woolworth resigned the position which he had held for three and one-half years, with much credit to himself and usefulness to the State, and accepted the place vacated by the death of Dr. T. Romeyn Beck. He is now the efficient Secretary of the Board of Regents of the University.

On the resignation of Dr. Woolworth, the Executive Committee appointed as his successor David H. Cochran, who was at the time occupying the position of Professor of Natural Sciences in the Institution. Previous to his connection with the Normal School, Prof. Cochran had been favorably known as Principal of an important Institution in the western part of the State. He was familiar with the management of the School, and possessed the entire confidence of its pupils, officers, and friends. Since his accession no material changes have been made in its organization. The requirements for admission have been raised, thus shortening the time previously allotted to some of the more strictly academical studies, and lengthening that assigned to the theory and practice of teaching. In addition to the Experimental School of Practice, a Model Primary School has been organized for the purpose of more thoroughly acquainting the graduates of the Normal School with the practical details

of primary teaching. This department is now in a flourishing condition. During the period that the school has been under the control of Dr. Cochran, the average number in attendance for each term has been 238, and the whole number of graduates 411, of whom 157 were males, and 254 were females.

The Normal School has now been in operation nearly nineteen years. Its present condition and the more apparent results of its working, may be gathered from the following extract from the last Annual Report of the State Superintendent of Public Instruction for the State of New York.

"During the past year, (1862,) two hundred and twenty-five applicants for admission were examined, of whom one hundred and ninety were admitted. The whole number in attendance has been two hundred and ninety-three, and of these, ninety-nine were males, and one hundred and ninety-four were females. The average age of these pupils was nineteen years and seven months: and the average period during which they had been engaged in teaching prior to their admission into the Normal School, was six months. All the counties of the State, with the exception of four, have been represented in the school."

"Since the establishment, one thousand three hundred and thirteen have enjoyed its advantages for a longer or shorter period."

"The graduates and under-graduates are represented by local school officers to be doing valuable service, not only in the schools in which they are employed, but as zealous workers, imparting their knowledge of the proper modes of instruction to their associates in teachers institutes and associations, who in turn apply the same to the schools under their charge, and thus the influence of this school is diffused."

During the first years of the existence of the school, as has been remarked, it encountered the most bitter opposition, and attempts were made to reduce the appropriation, and also to discontinue it altogether. So little were its aims and the importance of its work understood that it was deemed necessary to offer pecuniary inducements in order to secure pupils from the more remote counties of the State.

At the present time it has surmounted all opposition. In the character and work of its graduates, it has become favorably known in all counties of the State, which are now constantly represented in the school. The appropriation has been increased from \$10,000 to \$12,000, and each year the Superintendent of Public Instruction recommends the establishment of another similar Institution. In the language of his Report of 1862, "the permanence of this Institution may now be regarded as established, not only by legislative recognition and endowment, but also in the confidence and regards of the people."

As an evidence of this confidence, it may be mentioned here, that the Legislature in 1863, recognized the City Normal School of Oswego, as a State institution, and made an appropriation for its support.

STATE NORMAL AND TRAINING SCHOOL

AT OSWEGO, NEW YORK.

THE NORMAL AND TRAINING SCHOOL grew out of the necessities of the Oswego Schools. From the time of their organization in the summer of 1858 regular Saturday Institutes were held, which all teachers were required to attend for the purpose of receiving instruction in methods of teaching the various branches, and giving unity and efficiency to the organization, discipline, and teaching in the several departments of the schools.

These weekly meetings served their purpose very well, but as new teachers were continually coming in who required careful training in methods, it was found impracticable to keep all properly qualified for their work under this arrangement. It seemed very desirable that this special preparation should be completed before the teachers were employed in the schools.

This necessity was more strongly felt when, in the Fall of 1859, the present methods of "Object Teaching" were introduced into all the lower grades. This made it absolutely indispensable that all should have special and careful training in the new methods.

During the first year the Superintendent continued to meet the primary teachers every Saturday for the purpose of imparting the necessary instruction, and giving illustrations of the new methods with classes of children. As this process required to be continually repeated, and as at best it could be but imperfectly done, the Board resolved to establish a school for the practical training of teachers. To carry out this design more effectively, and especially in view of the new methods introduced, the Board resolved to secure the services of a teacher from one of the best Training Schools of Great Britain, where these methods were practiced. They accordingly entered into negotiations with Miss M. E. M. Jones, a woman eminently qualified for her work; and who had been for fifteen years exclusively engaged in training primary teachers in the Home and Colonial Training Institution of London. Her engagement with the Board was but for one year. At their urgent request she was persuaded to remain three months longer.

Aside from the regular members of the Training Class, the teachers in the primary departments of all the public schools received a full course of instruction under Miss Jones. No pupils were admitted into the class

who had not previously completed a thorough academic course equivalent to that pursued in the Oswego High School.

A number of active, intelligent teachers from abroad joined the class. These ladies are now occupying important positions in different sections of the country, several of them in Training Schools which have since been established.

The school soon gained an enviable reputation not only for its methods of *teaching*, but for its methods of *training*. As the number of foreign pupils rapidly increased, and as there was evident demand for increased facilities for the professional education of teachers in the State, in the winter of 1862-3 the Legislature made an appropriation of \$3,000 annually for two years, conditional on the attendance of fifty pupils, and the privilege of sending to the school two pupils from each Senatorial District free of charge for tuition.

In the spring of 1865 this appropriation was increased to \$6,000, without imposing any conditions as to attendance, except that each Assembly District should be entitled to send one pupil to the school, but requiring the Board of Education or citizens of Oswego to provide suitable buildings and grounds for the accommodation of the school.

These conditions have been complied with in the purchase and enlargement of a building located in the most delightful part of the city, on high and commanding grounds, overlooking the entire town, the lake and the surrounding country. The frontispiece gives a view of this building in perspective. Its entire length in front is 153 feet and in depth 180 feet. The center or main part is built of a beautiful gray limestone found on the shores of Lake Ontario. The wings are of wood. It is designed to accommodate 800 pupils in the Normal Department, and 600 children in the Model and Practicing Schools.

Hitherto the course of instruction in the school has been confined to *methods* of teaching, and particularly to methods of primary instruction.

The class is divided into two sections. One section receives instruction in methods in the morning while the other is teaching in the Practicing School. In the afternoon the divisions alternate, the section that received instruction in the morning practice, and vice versa. In the instruction the teacher illustrates every point by a lesson with the children. The pupil-teachers are then called upon in turn to prepare a written sketch of a similar lesson, to be presented to the teacher on the succeeding day, when some member of the class is called upon to work out her sketch with the children, under the criticism of the class and teacher.

At the end of each month these divisions interchange. The division that taught in the morning teach in the afternoon, and receive instruction in methods in the morning and vice versa. By this arrangement each teacher instructs a class in a given grade one month in the morning session, and one month in the afternoon, and then changes grades. This affords each pupil-teacher an opportunity of teaching all the subjects of each grade for one month.

On changing from one grade to another, the pupils observe the teaching of the critics for two days, and for one day the teacher whom they are to succeed in their practice. The teaching is all done under the careful supervision and criticism of the most capable teachers, selected with special reference to their adaptation to their work. After the close of the public schools at 3½ o'clock, both divisions of the Training Class meet an hour and a half for instruction in methods.

A criticism lesson is given every Monday at 8½ o'clock. At this exercise some member of the class previously appointed gives a lesson with the children on some subject assigned. At the close of the exercise the members of the class are called on in turn to criticise the teaching both as to the character and arrangement of the matter and method.

At the close of the exercise, in a kind of summary, the Principal criticises both teacher and critics.

The course of training embraces one year, one-half of the time being devoted to instruction in method and the philosophy of education, and the other half to teaching under criticism.

The Oswego Board of Education are the Executive Committee, to act under the advice and general direction of the State Superintendent of Public Instruction.

The Secretary of the Board, E. A. Sheldon, has acted as Principal of the school since the time Miss Jones returned to London.

The following extracts from a Circular of the State Superintendent of Public Instruction (Hon. Victor M. Rice) presents the conditions of admission, and the Course of Instruction for 1886:—

Each county is entitled to as many pupil-teachers in the Oswego Normal and Training School as it has representatives in the Assembly, and other qualified applicants are received until the accommodations are exhausted.

To gain admission to the school pupils must possess good health, good moral character, and average abilities. They must be able to pass a fair examination in Spelling, Reading, Geography, and Arithmetic, (as far as the roots;) also to analyze and parse simple sentences. Ladies must be at least sixteen and gentlemen eighteen years of age. Those who shall have passed the examination will receive a formal appointment from the Superintendent of Public Instruction, and be admitted to all the privileges of the school.

COURSE OF INSTRUCTION.

Elementary Preparatory Course.

This course is limited to one term of twenty weeks, which is devoted chiefly to instruction in Spelling, Reading, Writing, Book-keeping, (single entry,) Linear and Object Drawing, Geography, (physical and political,) Arithmetic, (oral and written,) History, Grammar, Analysis of Words, to Exercises in Impromptu Composition, and to Weekly Essays.

It is desirable that all pupils, on entering the school, be thoroughly qualified in these common English branches. Those not found so qualified will be required to pass through this course under thorough instruction before entering upon the Training Course.

Elementary Training Course

This course is limited to one year of two terms, each twenty weeks; and includes instruction in methods of teaching the branches named in the Elementary

Preparatory Course, and of miscellaneous subjects calculated to cultivate the perceptive faculties. Special attention will be directed to objective teaching, and to the philosophical yet simple methods of primary instruction.

B CLASS.—Methods of teaching the subjects comprised in the Elementary Preparatory Course; also instruction in the Philosophy of Education, School Economy, Physiology, Zoölogy, Botany, and Mineralogy, and Impromptu Composition, (oral and written.) Criticism lessons and essays weekly.

A CLASS.—The time of this class will be devoted to observation in the Model Schools, and teaching in the Practicing Schools, under the supervision of competent critics. Two hours, each day, will be devoted to Impromptu Composition, and to methods of teaching Form, Size, Measure, Color, Weight, Sounds, Objects, Animals, Plants, and giving Moral Instruction. Criticism lessons and essays weekly.

Students having satisfactorily completed the preceding courses will receive a diploma, signed by the Superintendent of Public Instruction, the Superintendent of the School, the Head Master, and the Officers of the Board of Education of the city of Oswego.

This diploma will serve as a certificate of qualification to teach common schools.

Advanced Preparatory Course.

Students to be admitted to this course must pass a satisfactory examination in the studies of the Elementary Preparatory Course; one much more critical than for admission to the Elementary Training Course.

As familiarity with any subject is essential to a consideration of the best methods of teaching it, no pupil will be admitted to the Advanced Training Class until properly prepared in all the subjects of this course. Those familiar with none of the branches herein named will require a full year and a half to complete the course; others, who have mastered a portion of them, may complete it in less time.

The students of this division may be arranged in three classes, according to their acquirements. Those conversant with some of the studies of each class may take up such studies as they need to pursue, in order to pass the required examination for the "Advanced Training Course."

SUBJECTS OF C CLASS.—Higher Arithmetic, Algebra, Grammatical Analysis, Rhetoric, English Literature, Book-keeping, (double entry,) Linear and Object Drawing, Botany, and Impromptu Composition. Rhetorical Exercises and Essays weekly.

SUBJECTS OF B CLASS.—Algebra continued, Geometry, History, Natural Philosophy, Perspective Drawing, Chemistry, and Impromptu Composition. Rhetorical Exercises and Essays weekly.

SUBJECTS OF A CLASS.—Astronomy, Algebra completed, Trigonometry, Surveying and Mensuration, Mental and Moral Philosophy, Geology and Mineralogy, and Impromptu Composition. Rhetorical Exercises and Essays weekly.

Advanced Training Course.

This course will occupy one term of twenty weeks, and will be devoted to instruction and practice in the best methods of teaching the branches named in the Advanced Preparatory Course.

In this course special attention will be directed to the Philosophy of Education, School History, School Law, Science of Government, School Organization, and Discipline; to the Theory and Practice of Teaching and School Economy generally. There will be frequent Criticism Lessons and Compositions.

A course of lectures will be given on Zoölogy, Physiology, and Hygiene, to be accompanied by reading on the part of the class. A portion of the time will be devoted to observation and practice in teaching under criticism.

To those who satisfactorily complete the course a diploma will be given, signed by the Superintendent of Public Instruction, the Superintendent of the School, the Head Master, and the Officers of the Local Board, certifying that the graduate therein named is "deemed qualified to teach the English branches usually pursued in the High Schools and Academies of the State."

MICHIGAN STATE NORMAL SCHOOL

AT YPSILANTI

HISTORICAL DEVELOPMENT.

THE importance of making early and efficient provision for a sufficient number of well qualified teachers, for the public schools of Michigan, was pointed out by the Superintendent of Public Instruction, Hon. John D. Pierce, in his first Report, dated December 27th, 1836, in which he remarks that "The most perfect organization of the entire system of schools in all the varied departments of instruction, must fail of securing the desired results without a sufficient number of competent teachers. Whatever system may be adopted and however perfect in form, it will prove itself essentially defective, unless it provides a sufficient number of teachers well educated and learned in the profession, men qualified and competent, men who can elevate and leave their mark upon their pupils. And such teachers may be had—efficient measures will soon furnish us with a full supply unless indeed intellect degenerates in this Western world. Such schools for the education of teachers as exist in Prussia and New York will furnish them." In the same Report, the Superintendent recommends that in "each county of a sufficient number of inhabitants, a school or branch of the University be established, with a department for the education of teachers for primary schools, and a course of instruction be provided for the same, which would occupy three years." Several of these departments were established, and Mr. Pierce in his report for 1838, recommends that more ample means be set apart for sustaining them on account of their importance to the success of primary schools, "being as they are, the sole means of obtaining a full supply of competent teachers." And again, in 1841, in alluding to these departments, he says: "We can look to no other source for educated, well qualified, and competent teachers."

His successor, Francis Sawyer, Jr., in his report for 1842, reiterates the importance of these departments, and also recommends that a regular school for teachers, with a model school connected, be established.

The successor of Mr. Sawyer, Hon. C. C. Comstock, in his report for 1853, refers to this subject, and recommends the establishment of Normal and Model Schools. Hon. Ira Mayhew, Superintendent in 1843, in his annual report, says: "Normal Schools, designed expressly for the education of professional teachers, are indispensable to the perfection of any system of national education." In subsequent reports he still further recommends the establishment of a Normal School.

After the presentation of this subject in official documents and in other ways, for twelve years, the Legislature in 1849, passed an act establishing a State Normal School.

This act provided that the Normal School should be under the direction of a Board of Education appointed by the Governor, by and with the advice and consent of the Senate. The Board were to procure a site and erect buildings, appoint teachers, and make all the regulations and by-laws necessary for the government and management of the school. Ten sections of salt-spring lands were appropriated for the purposes of a building fund, and fifteen sections for an endowment fund.

In accordance with this act, a Board of Education was appointed, which held its first meeting in the city of Detroit, in May, 1849. Provision was made for locating the lands granted, and for securing a site and the necessary buildings. At the next meeting of the Board in September, propositions were received from the citizens of Ypsilanti, Jackson, Marshall, and some other places; each tendering to the State a site for the buildings, together with subscriptions in money. After a full consideration of the liberal offers, the Board decided to locate the institution at Ypsilanti, the citizens of that place having tendered a suitable plat of ground for a site, and a cash subscription of \$18,500. The citizens also engaged to give the use of temporary buildings for the Normal and Model Schools, until a suitable building could be provided, and to pay the salary of the teacher of the Model School for five years.

The site consisted of four acres, beautifully situated upon the high grounds on the border of the village—now city—of Ypsilanti.

By an act of the Legislature of 1850, the ten sections of land appropriated for a building fund were consolidated with the other fifteen sections, to be denominated the Normal School Endowment Fund, and made inalienable except so much of the same, not exceeding ten thousand dollars, as might be required to complete the buildings, purchase necessary books, apparatus, &c., after exhausting the amount of donations.

The minimum price of the lands was fixed at four dollars per acre; but the Commissioner of the Land Office was required to procure an appraisal below which none could be sold. An appraisal was made in 1850. A large portion was appraised below the minimum price. Some were valued as low as \$1.50 per acre. These, of course, must remain unsold until they rose in value, or till the minimum price should be reduced.

In the same year, the Board added four acres more of land to the site for the buildings, and contracted for their erection for the sum of \$15,200, of which \$12,000 was to be paid by the citizens of Ypsilanti.

An act was passed by the Legislature of 1853, appropriating to the Endowment Fund, the moneys arising from the Swamp Lands previously sold by the General Government, not exceeding \$30,000. From this the school receives no benefit.

The Legislature of 1853 also appropriated \$2,000, annually, for two years, from the State Treasury, to the Endowment Fund, and \$3,000 to

the same, to be applied to the purchase of books, apparatus, and improvements upon the grounds.

But the income of the Normal School Fund, notwithstanding these appropriations, was inadequate to the wants of the institution. At the beginning of the year, 1855, it had exhausted its funds, and had contracted a debt of \$2,000. In this embarrassment, it encountered the evils that have attended the first years of every State institution, of whatever kind, from the organization of the State. It was found that the School must have further aid, or its usefulness would be so circumscribed that it could not accomplish half its work.

The Legislature of 1855, appropriated \$7,700 for that year, and \$6,000 for 1856. This gave relief for those two years; and in 1857, upon the recommendation of the Superintendent of Public Instruction, the same sums were appropriated for 1857 and 1858.

The income from the Endowment Fund has increased so as to amount to a little more than \$4,000 annually, and the appropriation from the State Treasury is \$7,500, making an aggregate income of \$11,500.

The original building for the Normal School was of brick, three stories in height, with rooms for the Normal and Model Schools. It was dedicated October 5th, 1852, when addresses were made by Hon. John D. Pierce, the first Superintendent of Public Instruction, Hon. Isaac E. Crary, Hon. C. Joslin, and Hon. Ross Wilkins. The dedicatory exercises were followed by the holding of a State Teachers' Institute for three weeks. This Institute was attended by two hundred and fifty teachers, and was organized and conducted as a temporary Normal School. The regular opening of the Normal School took place in the spring of 1853. In October, 1859, the Normal School building was destroyed by fire, but it was rebuilt and enlarged, and re-opened with appropriate exercises in April, 1860.

The cost of rebuilding, with the exception of the alterations and additions, was covered by the amount received from the Insurance Company. The furniture and ventilating apparatus were not included in the insurance, and were replaced from the funds of the institution.

On the first organization of the Normal School, in 1852, A. S. Welch was appointed Principal. He continued in charge until 1865, when he was compelled to resign on account of ill health. D. P. Mayhew, for many years a Professor in the school, was appointed to succeed him.

PRESENT CONDITION.

Admission.

The ages at which applicants may be admitted to the Normal School proper, are, for gentlemen, eighteen, and for ladies, sixteen years.

It is, however, in the discretion of the Principal to suspend the rule in favor of applicants under the required ages, if they manifest sufficient maturity of mind or advancement in study.

Those intending to finish the course before teaching are also received at an earlier age.

All pupils, on their admission, will be required to sign a declaration of intention to teach in the schools of this State, as follows:

We the subscribers, do hereby declare that it is our intention to devote ourselves to the business of teaching in the Schools of this State, and that our object in resorting to this Normal School is the better to prepare ourselves for the discharge of this important duty.

Members of the B class are further required to sign an agreement to attend the Normal School two terms before teaching in the schools of this State. These terms need not be consecutive.

All candidates for admission must pass a thorough examination in the following studies, viz: Reading, Spelling, Penmanship, Elementary Grammar, Local Geography, and Arithmetic through Compound Numbers and Vulgar Fractions. Students may enter an advanced class by passing an examination in all the preceding studies of the course.

Examinations for admission will be held on the Monday previous to the opening of each term, commencing at 9 A. M., at which time all persons desiring to be members of the school during the ensuing term, are required to be present.

Attendance and Expenses.

Applicants for admission are not received for less than an entire term, nor after its commencement, unless they have been detained by sickness or actual service as teachers.

Those desiring to enter the school are required to present themselves for examination one day before the opening of the term.

Every student pays two dollars at the beginning of the summer term, and three dollars at the beginning of the winter term, as an entrance fee.

Board and rooms can be obtained in the city at reasonable rates.

Many students hire rooms and furnish their own board, thus reducing their entire expenses; but students of different sexes, who are members of different families, will not be permitted to occupy rooms in the same house.

The school has a small, though well selected library, to which its members have access.

The books are intended mainly for reference, as the regular studies of the course give little time for general reading.

Terms and Vacations.

The terms of the Normal School commence, respectively, on the second Tuesday of April, and the first Tuesday of October, and continue, the former sixteen weeks, and the latter twenty-four weeks.

A vacation of three weeks follows the winter term, and one of nine weeks the summer term. The exercises of the school are suspended during the winter holidays.

The last week of each term is devoted to the public examination of classes.

The regular exercises of graduation take place at the close of the winter term, on the third Tuesday of March.

THE EXPERIMENTAL DEPARTMENT.

The Board of Education, in establishing the Model or Experimental School, had in view two prominent objects, viz: to give to advanced classes in the Normal School, practice in actual teaching, and to furnish a course of study preparatory to the regular course.

To attain the first object, each student in every E class is required to take charge of one daily recitation throughout an entire term, under a system of careful supervision and weekly reports. It is found that teachers who have been disciplined by several years training in the Normal department, are well qualified for the work of instruction in the Model School. The greater number of classes, however, are instructed by thorough and competent teachers, who are regularly employed for the purpose, or by members of the Normal School Faculty.

COURSE OF STUDY.

Previous to 1863, the course of study embraced the ordinary branches taught in Normal Schools, with professional instruction illustrating the method of teaching the elementary English branches; lectures on different topics relating to education, the organization and management of schools; and practice in teaching in the Model School.

In 1863, the Board of Education made some modifications in both the Normal and Model Departments, so that the programme of instruction in the Normal School was made to comprise two courses of study, and the Model or Experimental School was graded in four distinct Departments.

The course of study pursued in the Normal School is as follows:

Normal Training Course.

First Term.—A Class.

1. Concrete Arithmetic; Mental and Practical Arithmetic.
2. Object Lessons in Geography; Synthetical Geography and Map Drawing.
3. Drawing of Lines, Plane and Solid Geometrical Figures and Leaf Forms.
4. Reading, Spelling by object lessons, Penmanship, Composition by object lessons, Elementary Philosophy.

Second Term.—B Class.

1. Higher Arithmetic, Method of Teaching Arithmetic.
2. Synthetical Grammar, Composition.
3. Drawing of Fruits, Flowers and Animals.
4. Elocution, Vocal Music, with method of Teaching it.

Third Term.—C Class.

1. Analytical Grammar, with method of Teaching.
2. Physical Geography, with method of Teaching.
3. Object Lessons in Common Things, Colors, Geometrical Figures, Botany, Zoology and Properties of Bodies. Lectures on Primary Teaching.
4. Attendance and Practice in Experimental School.

The Higher Normal Course.

Algebra, Geometry, Natural Philosophy, Botany, Chemistry; Latin and Greek (for young men), Latin and German or French (for young ladies), Intellectual Philosophy and Vocal Music, Lectures on the numerous topics embraced under the Laws of Development, the Philosophy of Instruction, and the Organization and Management of Graded Schools.

COURSE OF STUDY IN EXPERIMENTAL DEPARTMENT.

Primary Department.

First Grade. Facts in Natural Science; Primary Colors; Botany—Trees, Shrubs, Bushes, Vines, Flowers, Grains, Vegetables, Fruits, Nuts, Seeds; Physiology—Human Body; Natural Philosophy—Air, Water, Rain, Snow, Hail, Vapor, Steam, Dew, Fog, Cloud, Sun, Moon, Stars; Mathematics—Counting by Objects, Time Table, Drawing Straight Lines; Language—Words, Things before Names, Moral Stories, Concert Verses, Gymnastics and Singing.

Second Grade. Botany Continued—Simple Leaf Forms and Flower Forms; Trees and Wood; Zoology—Animal, Mammals; 1, Two Handed; 2, Four Handed; 3, Flesh-Eating; 4, Cud-Chewing; 5, Thick-Skinned; 6, Gnawers; Color, Form, Size, Habits, Food, Uses and Speed of Domestic Animals; Natural Philosophy—Color, Scale of Tints and Shades of Primary Simple Properties of Matter; Mathematics—Counting by Objects, Addition, Long Measure by Objects, Drawing Angles and Plane Figures; Language—Webb's Primary Reader, Sounds of Vowels, Combination with Consonants, Moral Stories, Concert Verses, Maxims, &c., Singing and Gymnastics.

Third Grade. Botany Continued—Leaf and Flower Forms, Compound Leaves, Parts of the Flower, Root Forms; Zoology—Birds—1, Flesh-Eaters, 2, Perchers; 3, Climbers; 4, Scratchers; 5, Waders; 6, Swimmers; Natural Philosophy—Simple Experiments, Secondary Colors; Mathematics—Subtraction, Multiplication, and Division Tables by Objects, Analysis of Numbers, Drawing Plane Figures, Table of Miscellaneous Things; Language—Webb's First Reader finished, Spelling by Sound, Concert Verses, Singing.

Intermediate.

First Grade. Robinson's Rudiments to Fractions; Natural Philosophy by Objects; Second Reader, 45 pages; Spelling and Definitions; Elementary Geography begun; Singing.

Second Grade. Robinson's Rudiments finished; Swift's Natural Philosophy entire; Geography continued; Second Reader; Spelling and Definitions.

Third Grade. Davies' Arithmetic to Decimals; Wood's Object Lessons; Botany, Elementary Geography finished; Third Reader, Spelling, Singing, &c.

Grammar School.

First Grade. Sill's Synthesis, Davies' Arithmetic continued, Fourth Reader, Spelling, Composition, Declamation, Penmanship, Book-keeping, Drawing, Vocal Music, Physical Geography.

Second Grade. Analysis, Arithmetic finished, Zoology, Reading, Spelling, Composition, Declamation, Penmanship, Book-keeping, Vocal Music, Physical Geography.

Third Grade. History, Entomology, Algebra begun, Latin or German, Composition, Map Drawing, with Geography.

High School.

First Grade. Algebra finished, Latin, German or French, Botany (summer term), Physical Geography.

Second Grade. Physiology and Astronomy, Geometry begun, Latin, German or French, Composition.

Third Grade. Chemistry, Geometry, Rhetoric, Latin, German or French.

There are Teachers' Classes connected with many of the Union schools and academies of Michigan, in which teachers are educated for the schools in the vicinity of these institutions.

RESULTS.

The whole number of graduates from the organization of the school until 1867, was 192, of whom 82 per cent. had taught one year or more, 74 per cent. two years or more, and 68 per cent. most of the time since graduating. The average length of time those had taught who graduated before 1868, and were teaching in 1866, was eight years. Forty-seven per cent. of the graduates were still teaching in 1866. The State Board of Education, in one of their last reports, say:

"The Normal School continues in its course of eminent usefulness and success. The value of this school to the State cannot be easily estimated. Besides all it accomplishes in the matter of training teachers for the public schools, the good it does by the exhibition it affords of a school almost perfect in its organization and work, and the general stimulation it lends to the general study of educational science and art are producing marked and valuable results throughout our entire school system."

NORMAL SCHOOLS IN IOWA.

NORMAL DEPARTMENT IN STATE UNIVERSITY.

HISTORICAL DEVELOPMENT.

In 1849, while Iowa was a territory, a law was enacted, establishing three Normal Schools, one at Andrews, Jackson County, one at Oskaloosa, Mahaska County, and the third at Mt. Pleasant, Henry County. There was an appropriation of five hundred dollars per annum to each, to be paid from the income of the University fund, which at that time scarcely had more than a nominal existence. Buildings were erected and schools opened at Andrews and Oskaloosa, but they failed to receive the expected assistance from the University fund. The schools languished, died, and in 1855, the appropriation was withdrawn. No effort has since been made to revive them.

On the admission of Iowa into the Union, Congress donated seventy-two sections of land to aid in the establishment of a State University. The law under which the University was subsequently organized, contained a provision that it should annually educate fifty common school teachers; in subsequent acts, this was changed so as to require merely a Normal Department, which is now the law.

The Normal, in common with other departments of the University, opened on the third Wednesday of September, 1855. During the first year, the Normal Department was under the care and instruction of J. Van Valkenburg, Esq., and during that year, there were about seventy different students in attendance; many of whom, however, were quite young and elementary, giving it more the character of a primary, than of a professional school.

In June, 1856, D. Franklin Wells was appointed Mr. Valkenburg's successor, and in September, assumed control of the department. All students not prepared to enter upon a professional course for want of age or attainments, were excluded. After applying this sifting process, only three students were left who entered on the first day of the term. The number gradually increased, and by the close of the year reached forty.

The first class of five graduated June, 1858.

From 1858 to 1860, all the departments of the University were closed except the Normal. For several years it had its own corps of teachers, and was for all practical purposes a Normal School. Those are considered the most successful years of the Normal department. After 1860, the classes of this department were gradually combined with classes in the University when pursuing the same study.

From 1858 to 1864 inclusive, the Normal department included more

than half of the students in the University. In the latter year, the Normal students numbered 257. In the same year, the first year of the Normal course was transferred to the Preparatory department, which changed the relative numbers.

From its organization to 1867, upwards of 1,000 teachers received a full or partial course of study and training in the Normal department.

In 1866, after *ten years* of service, Mr. Wells retired from control of this department, and in 1867, Prof. S. N. Fellows was elected to the place.

In the spring of 1857, a Model School was opened in connection with the department, which was continued until 1866, when it was abolished. It was always very successful, and for the last two years of its existence had two departments and two *permanent* teachers, one of whom was from the Oswego Training School. In 1865 and '66, the attendance was 190.

The suspension of the Model School, in the opinion of the ablest educators of the State, very seriously impaired the usefulness of the Normal department. Practical training in the art of teaching and governing a school, is considered indispensable to the highest efficiency of Normal instruction in Iowa.

ADMISSION OF STUDENTS.

The requirements for admission, are, that young men must have attained the age of seventeen years, and young ladies that of fifteen years, and all must sustain a satisfactory examination in Reading, Writing, Orthography, English Grammar, Geography, and Practical Arithmetic through fractions. All students are required, on their admission, to give a declaration of their intention to engage in the business of teaching, as follows:

"We, the undersigned, hereby declare that it is our intention to engage in the business of teaching in the schools of Iowa, and that our object in resorting to the Normal Department of the State University, is the better to prepare ourselves for the discharge of this important duty."

Two students from each county, when recommended by the County Superintendent, are received free of charge. Others will be received upon the payment of the incidental fee of five dollars per term.

COURSE OF STUDY.

The course of study includes the common and higher branches of liberal English education, together with lectures on the theory and practice of teaching, method of instruction and graded schools, an examination of the school system of Iowa, and preparation and practice in the use of object lessons.

The members of this department, when pursuing studies taught in other departments of the University, are combined with the classes in those departments. They also share all the advantages of the library, cabinet and apparatus, which are enjoyed by students of the classical and scientific courses.

The following general courses of lectures are open to students in the Normal Department:

English Literature, Intellectual and Moral Philosophy.—President.

Greek and Roman Literature.—Prof. Currier.

Modern Literature and Political Economy.—Prof. Eggert.

Astronomy and Mathematics.—Prof. Leonard.

History of Physics and Chemistry.—Prof. Heinrichs.

Geology, Botany and Zoology.—Prof. Parvin.

The course of instruction occupies two years. A diploma is awarded to those students who complete the required course of study and training, and give satisfactory evidence of the proper qualifications for teaching.

The whole number of students in 1866-7, was:

Seniors: Ladies, 17; Gentlemen, 8—total, 25.

Juniors: Ladies, 27; Gentlemen, 10—total, 37.

Graduates: Ladies, 18; Gentlemen, 6—total, 19.

RESULTS.

The results of Normal instruction have been very satisfactory, and it is believed that the Normal department of the University has been an important instrumentality in improving the schools of Iowa. The State Teachers' Association, at its annual meeting in 1867, passed a resolution recommending the establishment of a Normal School in each congressional district.

A committee was also appointed to memorialize the Legislature, and to adopt measures to secure the object contemplated by this resolution.

The chairman of this committee, J. Piper, Superintendent of Schools in Manchester, Iowa, in January, 1868, issued a circular for the purpose of gaining information on the importance of Normal Schools, and their relation to a public school sys

OTHER MEANS FOR EDUCATING TEACHERS.

Iowa College at Grinnell, has an English and Normal Department for preparing teachers for the public schools of the State. Students in this department can recite with classes in other departments by permission of the faculty.

The course of study includes Elocution, Arithmetic, Modern Geography, Ancient and Physical Geography, Grammar, Algebra, Astronomy, Natural Philosophy, Physiology, American and Ancient History, Theory and Practice of Teaching, School Laws of Iowa, and Natural History.

Familiar lectures on the best methods of teaching and school government are delivered by members of the faculty.

The Ladies' Department of this College is under the immediate supervision of a Female Principal, and under the general direction of the faculty. The course of study is designed not only for thorough mental culture, but also for preparing young ladies to teach. The members of this department recite with classes in other departments, when the studies are the same, and have the privilege of attending the lectures.

Training Schools have been established by several of the cities of Iowa.

Though these schools were designed primarily to educate and train teachers for the cities in which they are located, they have exerted an important influence upon the schools of other places, and have to a certain extent supplied the place of State Normal Schools.

The school at Davenport, which is one of the oldest and most efficient Training School in the Western States, receives all applicants who are able to pass a creditable examination before the county superintendent. The teachers trained in this school have gone out to other places in the State, and have introduced improved methods of instruction in many towns and districts which have not been supplied with teachers from the Normal School.

A similar work is performed by Training Schools more recently organized in other parts of the State.

Teachers' Institutes have been very successfully maintained in Iowa, and have been so organized and conducted as to afford to young teachers the advantages of a temporary Normal School.

NEW JERSEY STATE NORMAL SCHOOL.

HISTORICAL DEVELOPMENT.

THE teachers and educators of New Jersey were among the earliest and most earnest to proclaim the necessity of special preparation for the office of teaching and training the young. Prior to 1825, Philip Lindsley, D. D., before he removed to Tennessee, and while tutor and acting President of the College of New Jersey, in an address delivered at Princeton, anticipated the utterance which he subsequently repeated in his inauguration as President of the University of Nashville: "Our country needs Seminaries purposely to train up and qualify young men for the profession of teaching. We have our theological seminaries, our medical and law schools, which receive the graduates of our colleges and fit them for their respective professions. And whenever the *profession of teaching* shall be duly honored and appreciated, it is not doubted but that it will receive similar attention and be favored with equal advantages." In the inaugural address in 1825, also referred to, Dr. Lindsley adds:

"Though the idea perhaps may be novel to some persons, yet the propriety and importance of such a provision will scarcely be questioned by any competent judges. The Seminarium Philologicum of the late celebrated Heyne, at Göttingen, though a private institution in the midst of a great university, furnished to the continent of Europe during a period of nearly half a century, many of its most eminent and successful classical professors and teachers." * * *

"At present, the great mass of our teachers are mere adventurers—either young men who are looking forward to some less laborious and more respectable vocation, and who, of course, have no ambition to excel in the business of teaching, and no motive to exertion but immediate and temporary relief from pecuniary embarrassment; or men who despair of doing better, or who have failed in other pursuits, or who are wandering from place to place, teaching a year here and a year there, and gathering up what they can from the ignorance and credulity of their employers. That there are many worthy exceptions to this sweeping sentence is cheerfully admitted. That we have some well qualified and most deserving instructors we are proud to acknowledge—and as large a proportion probably in this section of our country as in the older States. Still the number is comparatively small; and the whole subject demands the most serious attention of the good people of this community."

In a lecture on the school system of New Jersey, delivered January 23, 1828, in the Chapel of Nassau Hall, Prof. John MacLean (afterwards President) recommended "the establishment of an institution to educate young men for the business of teaching," and in a note examines and refutes the objections to such action on the part of the State.

In 1847, Prof. E. C. Wines, then of Burlington, in behalf of a special committee of a Convention of the Friends of Education held at Mount Holly on the 17th of November of that year, prepared a "Report on Normal Schools," which was printed by order of the Convention, and widely circulated. This document contains letters from Gov. Seward, Rev. Dr.

Campbell, Bishop Alonzo Potter, Horace Mann, Edward Everett, Prof. Palfrey, Prof. D. P. Page, and John A. Dix, strongly commending the establishment of special schools for teachers on general principles, and on the results of actual experience at home and abroad. The committee add: "So deeply was Mr. Cousin, the eminent French philosopher and educationist, impressed with this truth, (that good schools could not exist without qualified teachers, and that teachers could only become qualified by previous training, or actual experience)—that he declares it as his opinion that the State has done nothing for popular education, if it does not provide that those who devote themselves to teaching be well prepared. This, in the opinion of the committee, is one of the first duties of a State with regard to schools." "The most efficacious means of securing well qualified teachers is to be found in Seminaries, where a number of young men or women, intending to become teachers, are collected together, receive a common instruction in the subjects required for the schools in which they propose to teach, have lessons given them in the science and art of teaching, and practice the art under intelligent supervision. In this way, will the occupation of teaching be raised to the dignity of a profession. The teacher's respectability will then be secured, by the considerable attainments exacted of him. A strong *esprit de corps* will be produced among masters, which cannot fail to interest them powerfully in their profession, to attach them to it, in their eyes, and to stimulate them to continued efforts at self-improvement. Thus also will a standard of examination in the theory and practice of education be furnished for all candidates who have chosen a difficult access to the profession.

In 1855, Mr. John T. Clark, Principal of the Public School of New Brunswick, read an essay before the State Teachers' Association held at Trenton, (Jan. 18 and 19,) on the "Necessity and means of advancing the interests of common school education in New Jersey," in which he advocates "the establishment of a State Normal School with a Model School attached, wherein our young men and women shall be fitted for teaching, in the same manner as persons are fitted for other vocations—by an apprenticeship, as a business for life;" and in this connection the encouragement of Teachers' Institutes.

The same general views were presented by other parties, at the County Teachers' Institutes, Educational Conventions and Associations, and in the reports of the State Superintendent. In 1853-4-5, Henry Barnard, of Connecticut, presented the subject of the professional training and improvement of teachers, at Institutes held in different parts of the State, and particularly in the State House at Trenton, before the State Teachers' Association, on the 18th of January, 1855, in which the experience of the principal States of Europe and of several of the United States in this direction was set forth. In that year the State Normal School was established by the appropriation of \$10,000 annually for its current expenses, leaving it to the town where the school should be located, to provide suitable buildings and outfit in consideration of its local advantages.

The Normal School of New Jersey was opened in rooms temporarily provided in the city of Trenton, on the first of October, 1855, with fifteen pupils. The number was increased during the first term to forty-four. A new building, erected by private enterprise, was completed ready for use on the opening of the second term, and was occupied by the school the 17th of March, 1856. The Model School was opened at the same time in rooms prepared for it in the normal building. The prosperity and success of both schools soon made it necessary that additional room should be provided for the model department.

Through the liberality of an association of gentlemen of Trenton, a lot adjoining the Normal School was procured; and a Model School building erected and completed in 1857. This was rented to the Trustees of the Normal School for a term of years. The Trustees continued to hire the buildings occupied by the Normal and Model schools until 1865, when the Legislature passed an act authorizing their purchase.

As the effect of this act and the contract with the Normal and Model School Associations, the buildings, fixtures, library, apparatus and grounds of both schools, became the property of the State. The lot includes over four acres of ground, and with the buildings and fixtures, is valued at \$120,000.

The difficulty of obtaining board for the students at reasonable rates, led to the purchase and fitting up of a building which would accommodate the female pupils and teachers who had not homes in the city. By means of this arrangement a considerable reduction was made in the cost of board to the students, and they were brought together near the school under the eye of the teachers. The cost of the boarding houses, which are the property of the State, was \$30,000.

Besides the Normal and Model departments at Trenton, there is an auxiliary school at Beverly, known as the Farnum Preparatory School. This was founded in 1856, by the munificence of Paul Farnum, Esq., of Beverly, who gave the house and grounds, valued at \$50,000, and \$20,000 additional in cash, on condition that the school should receive from the State a small subsidiary grant. The Principal of the Normal School is *ex-officio* Principal of the Farnum Preparatory School. The total amount of property in grounds and buildings used by the Normal School and its auxiliaries, belonging to the State, is \$200,000. If to this is added the \$20,000 in bonds, the gift of Mr. Farnum, the income of which is for the support of the school, the total is \$220,000.

The school is under the direction of a Board of Trustees, appointed by the Governor by and with the advice and consent of the Senate. There are two Trustees for each Congressional District, so that all parts of the State and both political parties are equally represented. This intention has been faithfully observed in the appointment of Trustees, there being five from each political party.

The Trustees appoint the teachers, have a general oversight of the school, and make an annual report to the Legislature.

Mr. Wm. F. Phelps, who had been for some years connected with the State Normal School of New York, was appointed the first Principal of the Normal School of New Jersey, and continued in charge from its organization until 1864, when he resigned to take charge of the Normal School in Winona, Minnesota.

John S. Hart, LL. D., who had for eighteen months been Principal of the Model School, was unanimously chosen his successor.

CONDITIONS OF ADMISSION.

The general conditions of admission and the regulations for the students, are :—

Applicants must be at least sixteen years of age, and of unquestionable moral character. They must be in sound bodily health, and able to sustain a good examination in Spelling, Reading, Arithmetic, Geography and Grammar. They must declare their intention to teach in the public schools of this State for at least two years.

The candidate must present a certificate to the following effect from the Superintendent, the School Committee, or the Board of Education, of his township or city :

This is to certify that ———, of the township (or city) of ———, county of ———, New Jersey, aged ——— years, desires to obtain admission as a pupil in the State Normal School, and has given to me a declaration of ——— intention to engage in the employment of a common school teacher in this State, for at least two years, and being satisfied that ——— is of good health, and proper moral qualifications, I do recommend ——— as a person suitable by age, character, talents, and attainments, to be received as a pupil of the Normal School.

By the terms of the act establishing the State Normal School, "each county is entitled to fill three times as many seats in the school as it has representatives in the Legislature." In case any county is not fully represented, additional candidates may be admitted from other counties, on sustaining the requisite examination, and producing a proper certificate as above.

The candidates, on their admission, are required to sign the following Declaration and Agreement, which document is a permanent record with the Institution :

"The undersigned, having received certificates of admission as pupils in the New Jersey State Normal School, hereby declare that it is their intention to engage in the employment of teachers in the common schools of this State, for at least two years, and that their object in resorting to this school is the better to qualify themselves for that responsible duty. The undersigned also hereby agree to report themselves semi-annually, in writing, for the aforesaid period of two years, to the Principal of the State Normal School, in case they enjoy its privileges for one term or more."

Candidates are examined by the Faculty immediately on the presentation of the certificate before mentioned. This examination is confined to the topics named above, namely, Spelling, Reading, Arithmetic, Geography, and Grammar. Those wishing to be admitted to an advanced class, are likewise examined upon all the studies which have been attended to by the class to which they wish to be admitted.

COURSE OF STUDY.

The school is divided for recitations into four classes, all of which have Composition, Elocution, Drawing, Penmanship, and Vocal Music. The other studies of the D. class, are Geography, Arithmetic, Grammar, and

History of the United States.—Of the C. class, Geography, Intellectual Arithmetic, Grammar, Constitution of the United States, Botany, and General History.—Of the B. class, Algebra, Physiology, Natural Philosophy, Rhetoric, and English Literature.—Of the A. class, Geometry, Trigonometry, Natural Philosophy, Chemistry, Geology, Mental Philosophy, English Literature, American Literature, and Theory and Practice of Teaching.

Much attention is given in all the exercises to the cultivation of the power of expression. This is made a prominent object, not only by lectures and lessons upon this point, but by constant attention in every exercise. The student is taught to select the best language to give expression to his ideas, and to illustrate whenever necessary or practicable, by the use of the black-board and crayon.

The teacher of a class, after hearing part of a lesson, often calls upon a pupil without any previous notice, to take up a portion of the subject and examine his classmates upon it, neither he nor they having any book to refer to. Another practice which has been found quite successful, is that of frequent reviews. One lesson in the week in each branch, or every fifth recitation, is devoted to a review of the four preceding lessons, and on this review day, each pupil is subjected to a test so that his proficiency and power of expression may be ascertained and marked. The teacher never stops in the midst of a lesson to mark a pupil, but at its close marks those who have left upon his mind a distinct impression of their proficiency, or the reverse. By these various means, the daily recitations are made to contribute powerfully towards begetting in the pupils a habit of readiness and self-reliance, and a facility for verbal expression.

PRACTICE TEACHING.

Practice in teaching is secured in two ways—first, by members of the Normal School taking classes in the Model School, and giving instruction in assigned subjects, to these classes, under the general supervision of one of the teachers of this department; and second, by having practice teaching in the Normal School itself, one of the students taking a class in this school on certain designated days, and in subjects assigned by the Principal of the school.

To secure the best results in the employment of the latter method, the Principal, once a week, makes out a programme of exercises, with the names of those who are to teach during the following week, and the classes and lessons for each. This enables the pupil teachers to prepare themselves fully for the exercise. It is an indispensable condition in all these exercises that the lesson be given without the use of the book. When the pupil enters the room to teach an assigned lesson, he brings with him only a crayon and a pointer; he takes the entire charge of the class, maintaining order, questions the members of the class, corrects mistakes, illustrates the subject if necessary by diagrams or experiments, and in all respects acts as if he was the regular teacher.

During the exercise, the regular teacher sits by, observing in silence, and at the close of the day enters in a book prepared for that purpose, a full and detailed criticism of the work of the pupil teacher, giving an average mark for the same, the maximum being 100. These criticisms, together with the teaching average, are read to the pupil the next day by the Principal, in the presence of the class, and additional comments are made on any methods or principles of teaching involved in the criticisms.

The following notes on this method of practice teaching, are from the report of the Principal for 1868, and serve to give a good idea of the work :

NOTES ON PRACTICE TEACHING.

Miss — gave the C class a lesson in Elocution. She was animated and energetic in giving the vocal exercises, but she pitched her voice too high. The same shrill tone characterized the Concert reading. Many of the criticisms given by pupils were not loud enough to be heard by the whole class. One of the ladies, in giving a sketch of Shakspeare, said, "his principal work was Much Ado About Nothing, Merchant of Venice, &c.;" but the error passed unnoticed by pupils and teacher. Miss — herself said "Hamlet thought it wasn't Aina." She marked the pupils too high—the worst readers in the class receiving 8 and 9. Teaching average, 85. E.

Miss — gave the D class a lesson in History. She was well prepared with the history lesson; but she allowed the pupils too long a time to think and *guess*. A Chronology lesson is dry and uninteresting; and unless the teacher calls upon the pupils in *rapid* succession, thus keeping them wide awake, the interest will flag, and even good pupils will be inattentive. Miss — marked the pupils very judiciously. Teaching average, 90. E.

Miss — gave the D class a lesson in Arithmetic. She assisted the pupils too much. She did not require them to be accurate enough in answering questions; otherwise she taught very well, the subject being rather a difficult one. Miss — marked the pupils judiciously. Teaching average, 85. M.

Miss — gave the C class a lesson on the Constitution. She was quick in conducting the recitation. The entire period was spent in repeating mere words of the book; but once or twice the lady asked for the explanation of clauses, and then the answers given were neither full nor satisfactory, yet the lady ventured no comment of her own. Many practical questions might have been given by the teacher respecting the executive departments, ambassadors, consuls, treaties, and impeachments. The lesson contained many subjects of interest sufficient to occupy more than the allotted time. Teachers should call more frequently for definitions, and always take it for granted that their pupils are ignorant of the meaning of even the simplest words. I venture to assert that more than one-third of the class left the room without knowing the difference between a *reprieve* and a *pardon*. Teaching average, 80. E.

Miss — gave the D class a lesson in Grammar. She has improved since teaching for me before, but she still lacks energy and decision. She gave the pupil who was reciting all her attention; thus allowing an opportunity to some, (who took advantage of it,) to assume lounging positions in which to wait lazily for their turn to recite. Some remained wide awake, and embarrassed Miss — by speaking at any time, even interrupting her in the middle of a sentence to ask questions. Teaching average, 87. H.

Miss — gave the D class a lesson in Elocution. She cannot become a successful teacher until she studies the pronunciation of words. Not only did she permit mistakes made by the pupils to pass unnoticed, but she mispronounced many words herself; as, hos-pit-a-ble, for hos'-pit-a-ble, in-'tense for in-tense', etc.—the errors consisted chiefly in changing the accented syllable. In the word *machination*, however, though the accent was correctly marked, she taught the class to call it "mash-in-a-tion." There can be no possible excuse

for such carelessness, or rather ignorance, since the lady had three days for the preparation of the lesson. The dictionary should be kept in constant use by pupils and teachers. Teaching average, 65. E.

Miss — gave the O class a lesson in Elocution. She gave a very short vocal exercise and omitted the Concert reading. During the recitation she read *remarkably* well; her voice was clear and full, her emphases and inflections were correct, and her whole manner free from embarrassment. The entrance of three or four visitors did not in the least disconcert her; for her calmness and dignity she deserves much commendation. Teaching average, 95. E.

Miss — gave the C class a lesson in Ancient History. She was sprightly and animated. She spoke in a clear, decided tone; but she pursued no regular plan in conducting the recitation. Events in Egyptian and Assyrian history were indiscriminately mixed; the pupils became confused, and the lady herself was somewhat bewildered. Teaching average, 88. E.

Miss — gave the B class a lesson in Physiology. She evinced perfect familiarity with the subject of the lessons. She did not confine herself to the textbook, but asked many good, general questions. One of the pupils did not understand a portion of the lesson which was to be explained by a diagram. Miss — endeavored to make the matter clear by an explanation which was very good, still the pupils did not see it clearly. I think the teacher would have succeeded in clearing the difficulty if she had used the *pointer* instead of designating certain points by letters. She spoke a little too low. Teaching average, 96. M.

Miss — gave the A class a lesson in English Literature. She did not spend enough time upon the lesson for the day, and consumed too much of the period in reviewing the old lessons. She was not careful in examining the blackboards; lbs. was permitted to stand as the abbreviation of pounds sterling, and whimsicalities was spelled with two l's. The lady made no deduction for errors, all the pupils, with but one exception, received 10. She deserves commendation for speaking in a loud, clear tone. Teaching average, 88. E.

Miss — gave the A class a lesson in Elocution. She displayed the tact and skill of an experienced teacher. She assumed full authority over the pupils, (though they were her classmates,) and her whole manner was such that a visitor entering the room would have supposed she was the permanent teacher. One secret of her success was that she had given the reading lesson much home practice and preparation. Teaching average, 100. E.

Miss — taught the A class in Literature. She taught well. Though rather quiet, she succeeded in awakening the interest of her pupils, and the entire recitation was very animated. The class is a good one, and the pupils deserve as much commendation as the teacher. Teaching average, 96. E.

Miss — gave the B class a lesson in Elocution. She is a good teacher, and reads very well. She maintained her dignity and composure during the entire recitation, though several visitors were present. Nothing tends to embarrass a teacher so much as the entrance of strangers; the lady's calmness and self-possession then, are worthy of much commendation. Teaching average, 100. E.

Miss — gave the A class a lesson in Literature. She evinced thorough preparation, and displayed considerable tact in conducting the recitation. Every pupil was called on and compelled to recite or confess ignorance. Teaching average, 93. E.

Miss — gave the D class a lesson in History. She is one of the best teachers in her class. She is sprightly, animated, and critical. The lesson was well taught; a map having been neatly drawn on the board, the teacher required the most important places referred to in the lesson to be pointed out upon it. Teaching average, 100. M.

EXAMINATIONS.

Written examinations take place at the end of each term, and also at the end of every six or seven weeks, in all the studies of the school.

In order to secure entire fairness in the examinations, and to prevent improprieties of any kind, a card is placed in the hands of each pupil, containing the following directions:

1. On the day before the examination begins, take home all your books; see that nothing whatever is left in your desk except this card and your slate; that your desk is cleaned out and free from bits of paper and rubbish of every kind; that the ink well is in good order, and supplied with fresh ink; and that your slate is thoroughly cleaned.
2. Observe the same rule every day before leaving the examination room.
3. Come each day provided with pens, pen-holder, and pencil.
4. Write your name and the subject of examination distinctly at the top of each page.
5. You need not copy the questions upon the paper, but be careful to number each answer to correspond with the question.
6. If unable to answer any question, write its proper number, and opposite¹ the same, write, "I cannot answer."
7. In answering questions in Arithmetic, Algebra, &c., give the work as well as the answer.
8. After beginning a set of questions, do not leave the room without the permission of the teacher in charge, until that exercise is completed.
9. When under examination, avoid with the utmost strictness all communication with others, whether by talking, notes, signs, or otherwise; and do not look over the answers of others lying on the adjoining desks, or allow others in this manner to overlook your answers. Any violation of this rule will cause your exercise to be rejected.
10. Referring to text books, or to written or printed abstracts, or memoranda of any kind connected with the subject of examination, or having such book, abstract, or memorandum, in your desk, or about your person, will cause your exercise to be rejected.

In order to induce not only correctness as to the substance of the answers given, but a habit of carefulness as to the manner of expression, the teachers, in marking the examination papers, note minutely on the face of each paper every thing that is considered faulty. This is done by simply writing the figures 1, 2, 3, 4, &c., on the margin of the sheet, opposite any fault that may be noticed. Figure 1 indicates some fault in the heading, or in the general arrangement of the matter in the sheet; 2 indicates want of neatness; 3 indicates letters written indistinctly, or words not properly spaced; 4, spelling wrong; 5, punctuation wrong; 6, capitals neglected, or used improperly; 7, mistake in grammar; 8, sentences not complete; 9, answer not as full as it should be; 10, answer incorrect.

The object of this scheme of notation is simply to enable the teacher, with the least expenditure of time and labor, to indicate the various faults which mar the appearance and lessen the value of an examination paper. A small printed card, containing this scheme of notation, is placed in the hands of each teacher as a guide in marking the papers, and also in the hands of each pupil while writing his answers. The consequence is that the usually slovenly, careless, illegible, and unworkmanlike style of writing and expression is entirely broken up, and the pupils get unconsciously into the habit of expressing themselves upon paper in a manner that is agreeable to the eye and that is almost entirely free from the minor blemishes of composition.

When the examination papers have been marked and the faults noted with a pencil upon each paper, according to the scheme just explained, the papers are returned to the pupils, and with these papers before them, and with the aid of their books and of the explanations given by the teachers, they are required to write out a second complete set of answers. This exercise is not counted as a part of the examination, but it takes the place of an ordinary recitation. Its object is to fix in the minds of the pupils, while the matter is still fresh, all the corrections which have been pointed out. This revision of the work of examination has a most admirable effect. The questions are usually of a searching character, and reveal to pupils deficiencies in their knowledge, of which they had not been aware. Going over the ground a second time, while this impression is fresh.

BOARDING ARRANGEMENTS.

Although the tuition of the Normal School is free, it was found that the main item of expense, the board, had increased until it threatened seriously to embarrass the operations of the institution. Accordingly in September, 1864, a suitable building was secured and fitted up as a boarding-house for the use of the female pupils and teachers. By having a considerable number together, it was found that the expense to each student could be considerably reduced. The first experiment was so successful that the house was enlarged in 1865 so as to accommodate ninety boarders. The building, as thus enlarged, is 135 feet long by 37½ feet wide, and three stories high. It is planned with a special view to the wants of such an establishment, and is particularly convenient and attractive. The rooms are of good size, each suited to the accommodation of two pupils; they are neatly carpeted, and supplied with the necessary furniture, with one double bed, and with two large deep closets, one for the exclusive use of each occupant. The beds are furnished with mattresses, but not with pillows or bedding, each boarder being required to furnish these articles for herself.

One of the leading Professors, with his family, lives in the building, and he and his wife have the charge of the establishment. The arrangement altogether is giving the greatest satisfaction to the patrons of the school. Such an establishment was particularly needed for female pupils. Young ladies away from home, and boarding promiscuously through a large town, are exposed to social temptations, and they often lose much time in consequence, even when they do not form undesirable acquaintances, or fall into worse evils. Parents are reluctant to send their daughters to a distant town to attend school, where there can be, from the nature of the case, no adequate guaranty for an efficient supervision and protection out of school-hours. Besides these grave considerations, there is the important matter of economy, the cost of attendance at school having been reduced almost one-half.

The large boarding-house being entirely filled, and there being numerous applicants for admission, who could not be accommodated, the Trustees, in the summer vacation of 1867, took another large building adjoining the former, and fitted it up in similar style for the accommodation of forty additional boarders. This building also was immediately filled.

The resident Professor and his family, in consideration of their services in the management of the household, live in the house entirely free of cost. A charge of one dollar a week is made to each pupil, for rent and fuel. Under "fuel" is included all that is needed for cooking and washing, and for heating every part of the establishment; and under "rent" is included all that is necessary to pay interest, taxes and insurance on the cost of house, furniture and grounds.

The Trustees assume that an assessment of \$1 a week on each boarder will cover these items. This sum is a regular and fixed charge. Beyond that, the pupils are charged the actual cost of their living, and this

fact constitutes a very important feature of the plan. The actual cost of the remaining items has been maintained now for more than three years at \$2.50 a week, with a variation of only 25 cents for a single term, and the accommodations, both as to quantity and quality, have been such as to give entire satisfaction. But were the Trustees to undertake to board the pupils outright for this sum, there would be less care in regard to waste and breakage, and a more ready disposition to find fault and be discontented. Having paid a fixed sum, the boarders would feel like consuming the full worth of their money. On the contrary, the sum being contingent, they are more ready to acquiesce in any little economies which are to keep their expenses within bounds.

The boarding arrangements which have been described, are exclusively for the use of the female pupils and teachers. A similar establishment for the accommodation of gentlemen is imperatively needed, and is in contemplation.

FARNUM PREPARATORY SCHOOL.

The Farnum Preparatory School at Beverly was established and endowed by the liberality of Paul Farnum, Esq., and opened for the reception of pupils, on the 8th of October, 1856. It has a Board of Trustees of its own, but is designed as an auxiliary of the State Normal School, and an appropriation is made by the Legislature towards its support. As indicated by its name the course of study is preparatory, and has special reference to the more thorough and professional course of the Normal School. A large proportion of the pupils are from Beverly and the vicinity, but those qualified are admitted to the classes in the Normal School at Trenton, on successfully passing the required examination. One hundred and forty pupils were admitted the first term. This number has been increased successive years, and in 1867 amounted to two hundred and eighty.

PLANS AND DESCRIPTION OF THE STATE NORMAL SCHOOL OF NEW JERSEY.

The buildings occupied by the State Normal School of New Jersey, are two in number, one of which is occupied exclusively by the Normal School proper, and the other by both the Normal School and its adjunct, the Model School, but principally by the latter. The two were built and furnished at an expense of about \$55,000.

The plans are drawn on a scale of thirty-two feet to the inch. Each building is in the form of a Greek Cross, the main edifice running nearly north and south with wings or projections on the east and west. The front wing of the Normal School on the east, terminates in two towers, 10 by 10 feet.

The great objects secured in the adoption of these plans, are the highest degree of convenience and adaptation to the purposes of a school for both sexes, symmetry, tastefulness, economy in cost of construction, with ample facilities for lighting and ventilation, the ingress and egress of pupils, together with a full supply of water in the proper place, and for every desirable purpose.

The rooms are all large, airy, and commodious. The uses of each apartment will be understood by reference to the numbers indicated on the diagrams, and the accompanying explanation. Each building is heated by four of Boynton's first class furnaces, and ventilated by means of air passages leading from each room to a large chamber for the purpose in the attic, under the ventilator. These air chambers are heated by stoves, thus creating a forced draught from each apartment to the ventilator.

The furniture is of the latest and most approved character, and there are in the two buildings, fifteen hundred feet of the best Vermont and Lehigh wall slates.

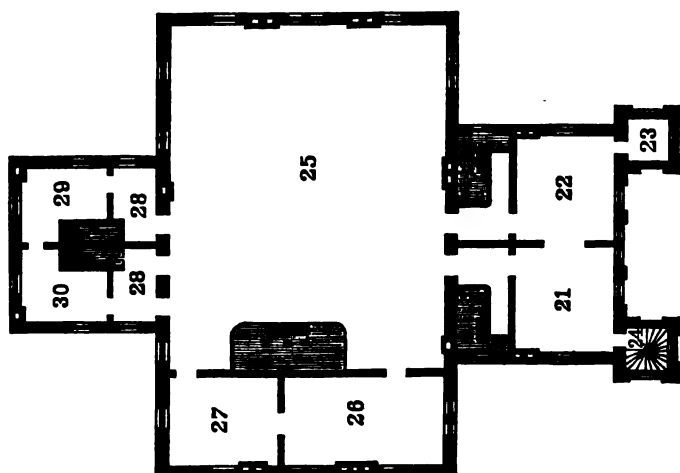
Fig. 2.—FIRST STORY.

1, Main entrance and Hall. 2, 2, Cloak Rooms for each sex. 3, 3, Toilet Rooms for each sex. 4, 5, Halls and entrances. 6, 6, 6, and 7, 7, 7, Recitation Rooms. 8, 8, Extra Cloak Rooms. 9, 9, Privies. 10, 10, Halls for each sex.

Fig. 3. SECOND STORY.

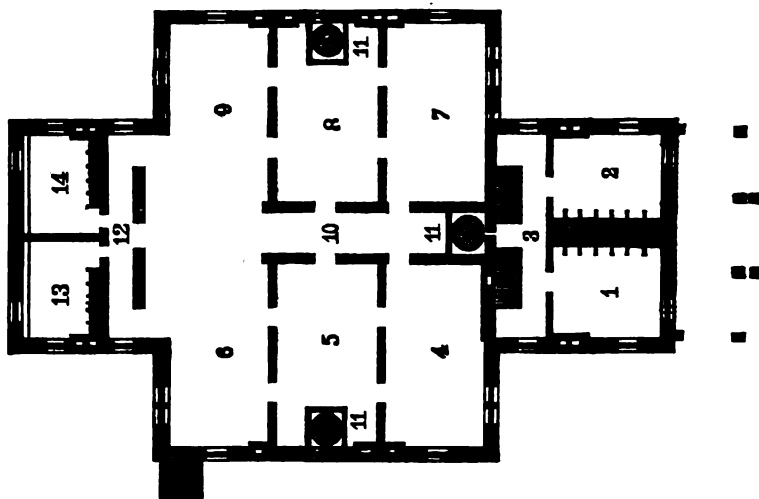
11, Reception Room. 12, Library. 13, 14, Teachers' Toilet Rooms. 15, 16, Halls and Stairways, each sex. 17, Assembly Room seated for 240. 18, 18, Recitation Rooms. 19, 19, Extra Cloak Rooms. 20, 20, Privies.

Fig. 4. THIRD STORY.



21, 22, Drawing Room and Models. 23, Bell Ringer's Room. 24, Passage to Observatory. 25, Lecture Room. 26, Recitation Room. 27, Room for Mechanical Drawing. 28, 28, Rear Halls. 29, 30, Apparatus Rooms.

Fig. 5. BASEMENT OF MODEL SCHOOL.



1, 2, Privies for Girls. 3, Halls to Privies for Girls. 4, 5, 6, &c., &c. Cellars and Furnaces. 13, 14, Privies for Boys. 12, Halls to Privies for Boys.

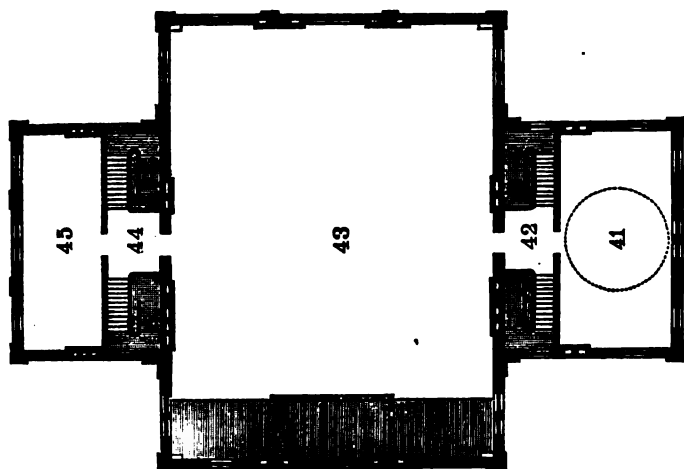
Fig. 6. FIRST STORY.—MODEL SCHOOL.

15, Halls, Girls' entrance, and main entrance. 16, 17, Girls' Cloak Rooms. 18, 19, 20, 21, 22, 23, School. 24, Hall, rooms graded, 40 pupils each. 25, Boys' Hall. 26, 27, Boys' Cloak Rooms.

Fig. 7. SECOND STORY.—MODEL SCHOOL.

28, Girls' Cloak Room. 29, Library. 30, Girls' Hall and Stairways. 31, 32, 33, &c., &c., School Rooms, graded, 40 pupils each. 37, Hall. 38, Boys' Hall and Stairways. 39, 40, Boys' Cloak Rooms.

Fig. 8. THIRD STORY.—MODEL SCHOOL.



41, Room for Drawing, lighted from the Dome. 42, Hall and Stairways. 43, Great Lecture Room of the Normal School establishment, 56 by 75 feet. 44, Hall. 45, Laboratory.

STATE NORMAL UNIVERSITY, BLOOMINGTON, ILLINOIS.

ILLINOIS STATE NORMAL UNIVERSITY

AT NORMAL, MACLEAN COUNTY.

The State Normal University owes its existence to a deep-seated conviction of the want of more well-instructed teachers for the free schools of Illinois. The question of establishing a school of some kind to supply this want, had been discussed by the leading educators of the State for several years; but the project of establishing a distinct and separate Normal School, first assumed a definite form at the annual meeting of the State Teachers' Association, at Chicago, in Dec. 1856.

After a protracted debate, a resolution unanimously prevailed, asking the Legislature to make an appropriation for the establishment and maintenance of a Normal School, and Messrs. WRIGHT, WILKINS and ESTABROOK were directed to lay the subject before the Legislature, on behalf of the Association. The late Superintendent of Public Instruction, Hon. N. W. Edwards, in his Report to the Legislature for 1856, recommended the establishment of such a school, and aided the project by his presence and influence. HON. WILLIAM A. POWELL, the new Superintendent, labored heartily for the enterprise. These gentlemen were met by a liberal spirit on the part of both Houses, especially the Educational Committees, and an act was drafted, discussed and passed, establishing and endowing a NORMAL UNIVERSITY, and creating a State Board of Education, under whose control it should go into operation.

The act provides that the avails of the Seminary and University funds, (\$300,000) shall be appropriated for the *support* of the Institution, but no part thereof can be used in purchasing a site or erecting buildings. The Board were instructed to locate the University in that city or town, accessible, and not otherwise objectionable, which should offer the greatest donation. It was understood that the central portions of the State were "accessible," and there competition ran high. At first almost every enterprising town in the interior took the initiatory steps toward making a bid; but some time before the day for opening the proposals, it was whispered round that Bloomington and Peoria were ahead of all competitors. Most of the smaller towns declined to submit their proposals, and the contest virtually lay between the two cities. The Board of Education, in a body, visited these points and examined the sites offered. The site at Bloomington consisted in two tracts of rolling prairie, one of 56, the other of 104 acres, connected by a narrow neck and lying about a mile and a half north of the city, near the junction of the railroads. The site at Peoria consisted of fifteen acres of land lying on the bluff, just back of and overlooking the city, and affording, doubtless, the most varied prospect in the State.

Upon opening the bids, it was found that Peoria had offered in the aggregate, including the estimated value of the site, over \$80,000; and

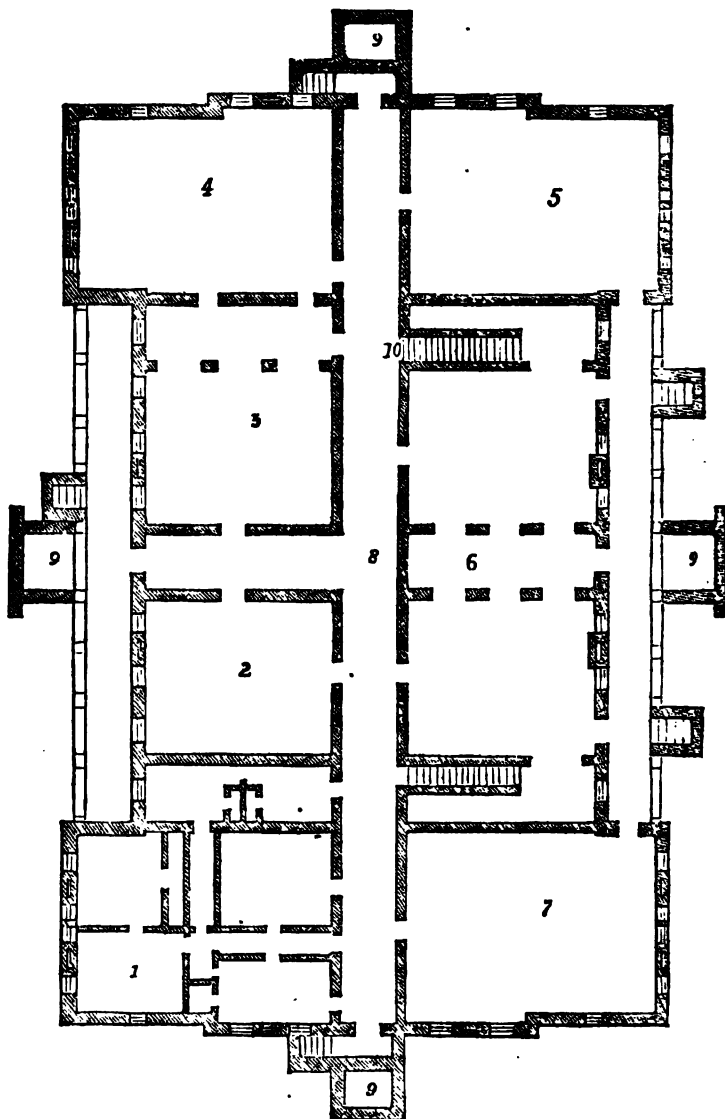


Fig. 2. PLAN OF BASEMENT.

In this story, (Fig. 2,) are the Janitor's House, (1,) consisting of a parlor, kitchen, cellar, three bedrooms, etc.; storage room, (2); laboratory, (3); chemical-lecture room (4); boys' play-room for Model School (5); boiler or furnace rooms (6); girls' play-room for Model School (7); corridor (8); filtering cisterns (9); and stairways (10).

that Bloomington had offered in the aggregate, including the estimated value of the site, over \$140,000. McLean county, by an appropriation

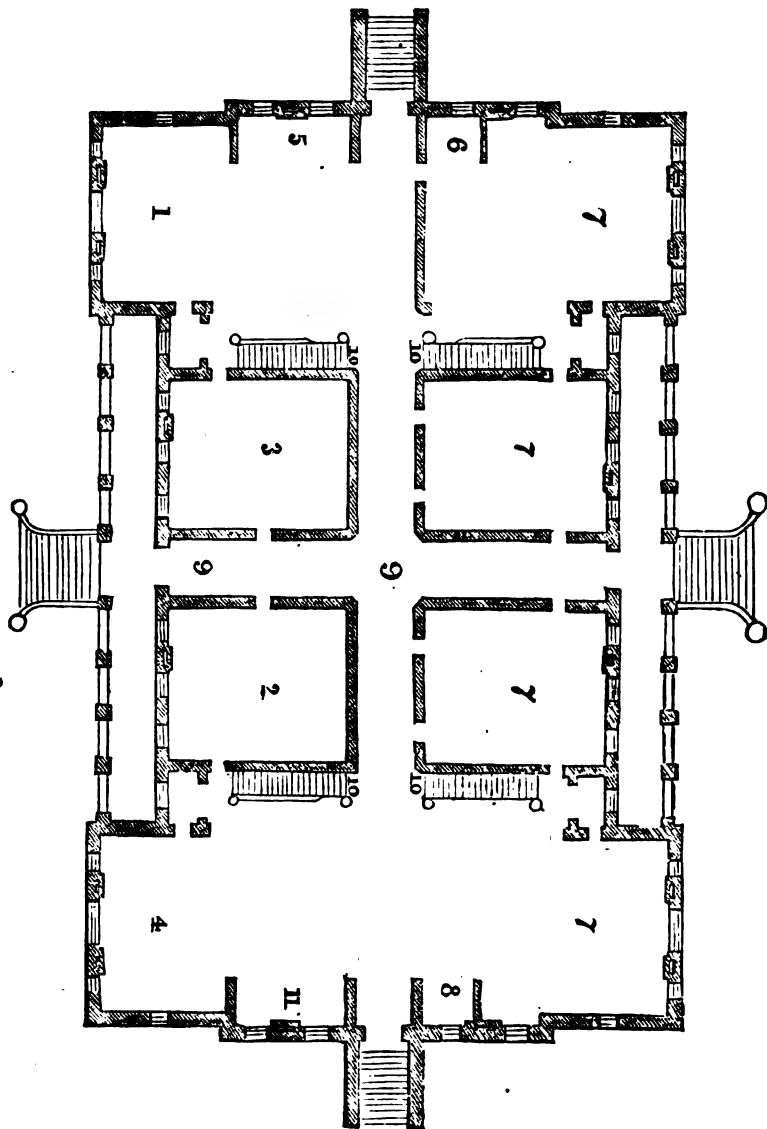


Fig. 3. PLAN OF FIRST FLOOR.

In the principal story, (Fig. 3) 15 feet high in the clear, are the Principal's room, 30ft. x 22ft. 6in. (1); the reception room, 31ft. 6in. x 27ft. (2); book and apparatus room, 31ft. 6in. x 27ft. (3); teachers' retiring room, 30ft. x 22ft. 6in. (4); gentlemen's wardrobe, 32ft. x 19ft. 9in. (5); masters' wardrobe for Model School, 32ft. x 10ft. 2in. (6); Model-School rooms, 32 x 32ft. and 25ft. 6in. x 37ft. 6in. (7); misses' wardrobe for Model School, 32ft. x 10ft. 2in. (8); corridors (9); and the stairways (10).

of \$70,000 from her swamp-land fund, enabled Bloomington thus to out-strip her rival.

We know of nothing more honorable than this competition between the different towns of Illinois, for the advantages which must flow from an institution of this kind rightly managed, in all future time.

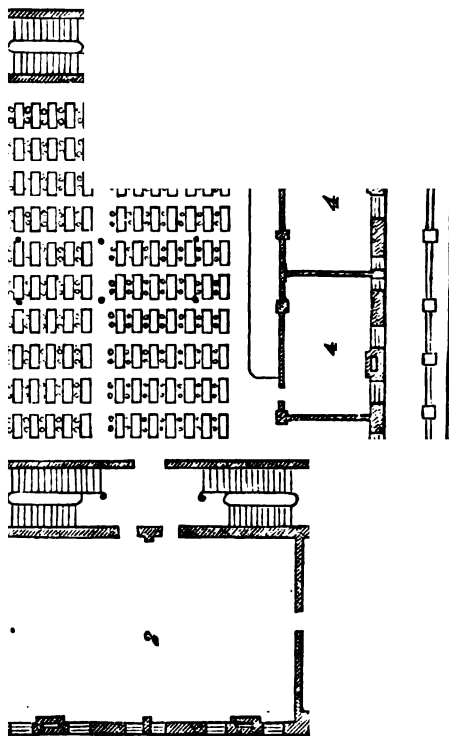


Fig. 4. PLAN OF SECOND FLOOR.

In the second story, (Fig. 4.) 16 feet high in the clear, are the Normal School room, 60×66 ft. (1); two lecture rooms, 51×32 ft. (2); four class rooms, 30×23 ft. (3) two class rooms, 27×15 ft. (4); and the stairways (5).

The Board of Education elected Prof. C. E. Hovey, (Principal of the Union School of Peoria,) Principal, and adopted, on his recommendation and that of G. P. Randall, Architect, of Chicago, the plan of a building to accommodate three hundred normal pupils, and two hundred model school pupils, and to be erected at a cost of \$80,000. The exterior and internal arrangements of the building, are represented in the diagrams: 1, 2, 8, 4, 5.

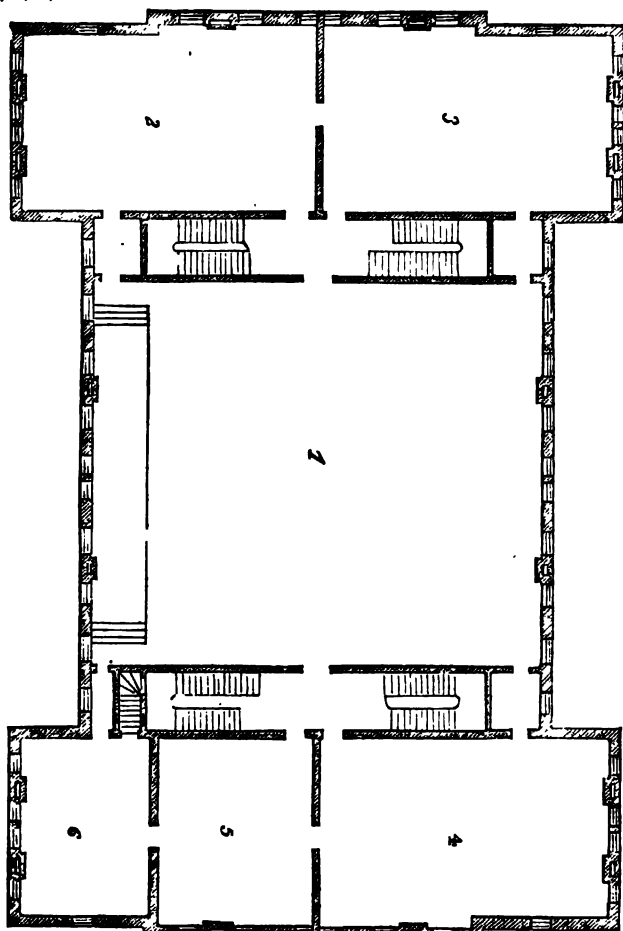


Fig. 5. PLAN OF THIRD FLOOR.

In the third story (Fig. 5,) 20 feet high in the clear, are the Normal Hall, 65x75 ft. (1); library, 32ft. 4in.x48ft. 6in. (2); museum, 32ft. 4in.x48ft. 6in. (3); gallery of painting and statuary, 32ft. 4in.x48ft. 6in. (4); music room, 32x25ft. (5); and an ante room, 32ft. 4in.x22ft. 4 in. (6).

The building is warmed by steam, and the ventilation of each room is secured by a separate flue properly constructed for this purpose.

The seats and desks are manufactured by Joseph L. Ross, Boston, after the most approved patterns.

ORGANIZATION.

The building was substantially completed in 1860, and the classes were removed to it from the temporary quarters occupied in Bloomington. The University is provided with philosophical and chemical apparatus, and with books of reference. The museum and library of the Illinois Natural History Society are located in the University building.

President Hovey, the first Principal, remained in charge of the institution until 1862, when he resigned, and Richard Edwards, Principal of the St. Louis Normal School, was appointed to succeed him.

The University is under the control and supervision of the State Board of Education, which consists of the Governor of the State, Superintendent of Public Instruction, and fourteen other persons appointed by the Governor, by and with the advice and consent of the Senate.

ADMISSION OF STUDENTS.

The requirements for admission are, that young men must be at least seventeen and young ladies sixteen years of age; all candidates must produce a certificate of good moral character, signed by some responsible person, and must also sign a declaration of their intention to devote themselves to school teaching in this State, in form as follows:—"I hereby declare my intention to become a teacher in the schools of this State; and agree that, for three years after leaving the University, I will report in writing to the Principal thereof, in June and December of each year, where I have been, and in what employment." Candidates must also pass a satisfactory examination before the proper officers in reading, spelling, writing, arithmetic, geography, and the elements of English grammar, in pursuance of the Normal University Act.

Each County within the State shall be entitled to gratuitous instruction for two pupils in said Normal University, and each Representative District shall be entitled to gratuitous instruction for a number of pupils equal to the number of representatives in said district, to be chosen in the following manner: The School Superintendent in each county shall receive and register the names of all applicants for admission to said Normal University, and shall present the same to the County Court, or in counties acting under township organization to the Board of Supervisors; which said County Court or Board of Supervisors, as the case may be, shall, together with the School Superintendent, examine the applicants so presented, in such manner as the Board of Education may direct, and from the number of such as shall be found to possess the requisite qualifications, such pupils shall be selected by lot; and in representative districts composed of more than one county, the School Superintendent and County Judge, or the School Superintendent and Chairman of the Board of Supervisors in counties acting under township organization, as the case may be, of the several counties composing such representative district, shall meet at the clerk's office of the County Court of the oldest county, and from the applicants so presented to the County Court or Board of Supervisors of the several counties represented, and found to possess the requisite qualifications, shall select by lot the number of pupils to which said district is entitled. The Board of Education shall have discretionary power, if any candidate does not sign and file with the Secretary of the Board a declaration that he or she will teach in the public schools within this State, in case that engagement can be secured by reasonable efforts, to require such candidate to provide for the payment of such fees for tuition as the Board may prescribe.

If any county or representative district neglects to make appointments, the President of the University is, by a resolution adopted by the Board of Education, authorized to fill the vacancy by appointing any person of proper age and qualification. Every such person must pass, before the President, an examination similar to that required before the county superintendent in other cases.

COURSE OF STUDY.

The course of study occupies three years. Each year is divided into three terms, the first of fifteen, the second thirteen, and the third twelve weeks in length. The studies pursued are reading, spelling, English grammar and literature, rhetoric, criticism, arithmetic, algebra, geometry, trigonometry, geography; history, ancient and modern; natural philosophy, chemistry, astronomy, botany, physiology, book-keeping, writing, drawing, vocal music, metaphysics; and professional studies, including history and methods of education, school laws of Illinois, and the Constitution of the United States and of Illinois. The following are optional: Latin, Greek, algebra, trigonometry, analytical geometry, calculus, and zoölogy.

BOARDING ARRANGEMENTS.

The Superintendent of Public Instruction and the Principal of the University have recommended the erection of a boarding-house for the accommodation of students. Board can be obtained in good families for about four dollars a week, exclusive of fuel, lights, and washing. A portion of the students board in clubs, and thus reduce the expense nearly one-half.

MODEL SCHOOL.

The Model School, which is in the same building with the Normal School, is furnished with all the appliances necessary for giving a thorough education, either as a preparation for college or for business. It has four grades, each under the charge of a separate, permanent teacher. Instruction is given in the elementary and higher English branches, and in Latin, Greek, French and German. Physical exercises are daily practiced by the entire school. The only requisites for admission are a small fee and good character. Pupils on being examined are classified according to their attainments.

The students of the Normal School, after attending two terms, have classes assigned them in the Model School. These classes have recitations at hours which do not interfere with the recitations in the Normal Department, so that the pupil-teachers do not lose their recitations in the Normal School while teaching in the Model School. The Model School is thought to be of important advantage to the Normal School. The connection has been mutually advantageous.

The number of students in the University in 1866-67 was as follows:—In the Normal Department: Senior class—Ladies 7, gentleman 6, total 13. Middle class—Ladies 82, gentlemen 26, total 58. Junior class—Ladies 167, gentlemen 89, total 256. Total in Normal Department, 327.

PENNSYLVANIA STATE NORMAL SCHOOLS.

THE Normal School Law of Pennsylvania divides the State into twelve districts, in each of which a State Normal School may be established whenever private contributions make it practicable.

NORMAL SCHOOL IN THE SECOND DISTRICT.

AT MILLERSVILLE.

The school in the second district, at Millersville, was recognized as a State institution in 1859, and it has since received 8,754 students, of whom 2,490 were males, and 1,264 females. Seventy-two have graduated in the elementary course, twenty-two in the scientific course, and two in the classical course. In 1867, there were six hundred and fifty-two students in the Normal department, and one hundred and sixty in the Model school. The buildings and other property of the school cost over \$70,000.

One-half of the members of the graduating class teach in the Model school during the fall and winter terms, and the others in the spring and summer terms. Those who are thus engaged in the Model school meet the principal upon two evenings each week for special instruction in the theory of teaching. At these meetings the principal reads from notes that he has taken while in the school during the day, comments upon them, and commends or disapproves as he thinks the circumstances require. The students state any difficulties that may have arisen during the day. These, and the remedies, are freely discussed by teachers and students. The superintendent of the Model school also meets this class for a similar exercise one evening in each week.

The principal gives instruction to two classes each day in the "Theory of Teaching." These classes use a text-book. Besides this, many of the members of the graduating class recite daily in mental science, in which recitation the proper methods of cultivating the faculties are familiarly discussed.

Of those who expect to receive aid from the State, but about one-half are especially interested in the theory and practice of teaching.

The school during the past year (1867) was prosperous. The graduating class consisted of twenty members, and passed a satisfactory examination. All the members are engaged in teaching, excepting two, and some of them are occupying positions of responsibility and honor.

The results of the system of training adopted are more than satisfactory—they are subjects for congratulation and pride. The pupils of this institution are among the most successful teachers in the State. They are sought after wherever good teaching can be appreciated or remunerated. They are found in common schools and high schools, as principals

of academies and seminaries, professors in normal schools and colleges, and as energetic and successful county superintendents. In whatever position they labor, they distinguish themselves as faithful and skillful workers. They seem to be imbued with the true spirit of the educator; earnest, devoted, self-sacrificing, laboring for the success of the cause. They are punctual in their attendance upon educational meetings, ready to aid at institutes and associations, and are becoming an educational power in the commonwealth. These facts indicate the success of the system, and demonstrate the value of Normal schools to the State.

NORMAL SCHOOL IN THE TWELFTH DISTRICT.

AT EDINBORO.

The school in the twelfth district at Edinboro, was first chartered as an academy in 1856, then changed to a Normal school and recognized as a State institution in 1861. It has land, buildings, furniture, library, apparatus, and other property, valued at \$36,750. The whole number of students received is 1,444, of whom 775 were males, and 669 females. Thirty have graduated. There were 425 in the Normal department in 1867, and 188 in the Model department.

In this school the instruction on the subject of professional knowledge, skill and experience in teaching, is communicated to the graduating class as well as to those who are receiving State aid, by lectures by the principal. The members of the graduating class hear lessons in the public school, which is taught in the Model school rooms, but which has no connection whatever with the institution.

NORMAL SCHOOL IN THE FIFTH DISTRICT.

AT MANSFIELD.

The Normal school in the fifth district, at Mansfield, was first organized in 1854 as a Classical seminary, under the charge and patronage of the Methodist Episcopal church, but its founders, with a large liberality, offered it as a State Normal school, and it was accepted in December, 1862. The buildings, furniture, library, apparatus and other property, are valued at \$49,000.

This institution is divided into two departments. One is called the Normal, or Teachers', and the other the Academic, or Business department. It not unfrequently happens that a large proportion of those entering the academic, or business course, change their minds, and commence making preparation for teaching.

The direct means employed in training teachers is, first, the regular daily drills upon the *subject matter* of teaching. In these exercises, no instruction in the branches is attempted to be given. Each pupil has a text-book upon the subject of teaching, and topics are assigned for the consideration of the class. The *theoretical* and *practical*, the *possibles* and *impossibles*, are here presented. The experiences and opinions of those who have taught are placed side by side with those who have not.

The failures of youthful indiscretion are compared with more mature reflections of age.

The senior, or graduating class, in addition to the studies of the course, take up the theory of teaching as a study, and practice teaching in the Normal school forty-five minutes a day for one-half of the school year. This class meets twice a week with the principal, or some of the faculty, and the principal of the Model school, where the work of the experimental class is discussed, failures and success pointed out, and words of approval and encouragement given when and where needed.

The whole number of students received is 1,290, of whom 555 were males, and 735 females. Thirty-seven have graduated. There were 283 in the Normal department in 1867, and 128 in the Model school.

NORMAL SCHOOL IN THE THIRD DISTRICT.

AT KUTZTOWN.

The Keystone Normal school in the third district, at Kutztown, originated in the demand for better teachers and in the conviction that a Normal school was necessary to supply that want. Its buildings, furniture, library, apparatus, and other property, are valued at \$55,000, of which \$20,000 was contributed by the citizens of Kutztown and Maxatawny townships. The school was recognized by the State superintendent as a State institution, on the 18th September, 1866, and the building was formally dedicated on the 15th of the same month.

The faculty of instruction includes eleven professors and tutors, a larger number of gentlemen than either of the other Normal schools; but the number of female instructors is less, it being but two in this school, and it is five or seven in the other schools. The Model school is under the superintendency of an experienced teacher who is employed by the Board of Trustees, and the teaching is principally done by students from the Normal school. These students first pass a year in studying the theory of teaching by means of text-books and lectures in the Normal school, and then practice at least three-fourths of an hour daily in teaching pupils in the classes of the Model school.

The number of students received the first year was 843, of whom 266 were males, and 77 females, being a larger proportion of male students than is reported from any other Normal school in this country.

WISCONSIN STATE NORMAL SCHOOLS.

HISTORICAL.

In 1857, an act was passed by the Legislature of Wisconsin appropriating twenty-five per cent. of the income arising from swamp and overflowed lands, for Normal School purposes, and creating a Board of Regents to regulate its distribution. This Board did not consider itself authorized under that act to establish a Normal School, and the income from the first year was applied to the aid of Colleges and Academies which organized and instructed normal classes.

In August, 1858, Henry Barnard became Agent of the Normal Regents, and organized a system of oral and written examinations of the Normal Classes in the Colleges, Academies and High Schools of the State, as a basis of the distribution of the income of the Normal Fund, and commenced in 1859 a series of Teachers' Institutes in the different counties and of Educational addresses in the principal towns of the State. By these examinations, Institutes and professional gatherings of teachers in Town and County associations, he was able to reach in a single year, (1860) three fourths of all the teachers in the State—both those who entered on their work for the first time, as well as those more experienced. His plan of operations in 1861, embraced besides an Institute of four weeks at Madison as the nucleus of a Normal Department in the University, a series of special classes, at different parts of the State, viz : for Teachers and such as proposed to teach ; 1, The ungraded District Schools ; 2, Primary Schools, and home classes of little children ; 3, Intermediate and Grammar Schools and the largest or central district schools ; 4, High Schools and Academies ; 5, Normal Schools and Classes ; 6, Colleges and all higher institutions which have a common curriculum. He had received from the most accomplished teachers in the State such pledges of co-operation in their respective fields of labor, that he anticipated larger professional gatherings and more systematic professional instruction than had ever been given elsewhere. This plan of Institutes was to be crowned by the establishment of at least three State Normal Schools, (of which one was to be a Special School of the University at Madison,) and a training or practicing school in connection with the High School in each large city.

Connected with an account of these County Institutes, and the names, residence, previous opportunities of professional instruction, and experience in teaching of each member, Mr. Barnard projected in 1859 the publication of a series of papers, selected from the American Journal of Education, on the organization, instruction and discipline of schools. In pursuance of this plan, four volumes were issued with the title of Papers

for the Teacher, and more than one thousand copies of each were distributed among the teachers of the State. The entire series embraced twenty treatises, and would have constituted the most comprehensive Library of Education yet issued in this country.*

The Superintendent of Public Instruction, (J. L. Pickard,) in his Report for 1863, remarks: "These Normal departments of Colleges, Academies, and High Schools, have not satisfactorily met the necessity. They are almost always subordinate departments; nor will the aid furnished warrant giving them a prominent place. Much good has been accomplished by these agencies, but they are at present inadequate to the demand. Permanent Normal Schools are needed, whose sole business shall be the training of teachers."

The Normal department in the State University was opened in 1863, and the attendance was for a time quite large.

In 1865, the Legislature passed an act to dispose of the swamp and overflowed lands, and the proceeds were appropriated to the Normal School fund. This act provides that the income of the Normal School fund shall be applied to establishing, supporting and maintaining Normal Schools under the direction and management of the Board of Regents of such schools, *provided*, that twenty-five per cent. of said income shall be annually transferred to the school fund income, until that shall reach the sum of two hundred thousand dollars.

* These plans, as agent of the Normal Regents, as well as his larger plans as Chancellor, for the development of the State University, and of schools and education generally in Wisconsin, were crippled from the start by inadequate resources, (at least one half less than was promised before he accepted the responsible position, both from the University Fund, and the Normal School Fund,) and were finely relinquished in consequence of severe illness, which was followed by a prolonged physical prostration from which he did not recover for two years. His plans for the University embraced,

1. General co-operation with the State Superintendent of Public Instruction in developing a system of elementary instruction, and in establishing in every city and large village a Public High School, open to both sexes, and with a scheme of studies equal to the most advanced school of this grade in any part of the country.

Into this class of schools were to be merged the incorporated Academies, with their endowments as far as practicable pledged to support such studies as the majority of citizens might not appreciate sufficiently to maintain by public tax—and with them was to be established a system of university scholarships. These Public High Schools were to be developed as the natural reliance of the State University for students and into them were to be absorbed the studies then constituting the first year of a college course.

- (2.) The discontinuance of the Preparatory Department, or Grammar Schools in the University, and its re-establishment as part of the City High School of Madison, as a model school of its grade, in which the classical department was to be under the care of the Chancellor.

- (3.) The reorganization of the University on the basis of a General Course of two years which was to be an extension of the studies of the Public High School, and in which proficiency in the English language and its literature, as well as in the German, was to count as high in the distribution of College honors, as either the Latin or Greek, and on the completion of this course (six years on the elementary course,) the first Academic degree was to be awarded.

- (4.) To the General Course was to be added Special Schools, devoted to Education, Law, Medicine, Agriculture, Mining, Engineering, Commerce, and the other Industries of the State.

- (5.) As the crowning feature of a State system of professional training of teachers, there was to be a Normal Department open to both sexes, in which the course of instruction should be liberal, as well as special—and embrace Ethics, Metaphysics, and logic,—physiology and hygiene, the constitution of the United States, and of Wisconsin, the law of the citizen and the man of business, the principles of public economy, and the history and principles of Art.

The Normal School fund amounted in 1867 to \$600,000 already invested and paying seven per cent. interest, and 750,000 acres of land yet to be sold and the avails added to the fund, which will thus be increased, it is supposed, to amount to a million and a half of dollars.

The Normal department of the University has been reorganized under the law of 1867, and is now practically a college course for young women. Students in this department may also attend all the University lectures, and may, in addition to the course of study prescribed for graduation, elect any study in the College of Arts and Letters.

Five Normal Schools have already been located—one at Platteville, Grant County; one at Whitewater, Walworth County; one at Oshkosh, Winnebago County; one at Sheboygan, Sheboygan County; and one at Stoughton, Dane County. These schools are under the immediate supervision of the Board of Normal School Regents appointed by the Governor and confirmed by the Senate. There is also an Examining Committee appointed annually to visit and examine the Normal Schools. Hon. John G. McMynn, in his report for 1866, says:

"The development of our Normal School system is the most difficult educational problem that presents itself for solution at the present time. To make these schools promote the interests of public education, to so conduct them as to secure for them the confidence of the people, to so manage them as to train teachers in them for the common schools, to guard against the tendency to convert them into academies or high schools, to render them so attractive and so efficient as to bring large numbers of teachers under their influence, and to carry them on with such economy as to keep their expenses within the income provided for their support, will demand the watchful care of the people, the heartiest coöperation of the Legislature, and the greatest discretion and wisdom of the Board appointed to manage them.

They may be well attended, the discipline may be excellent, and their teachers well qualified; classes may graduate with honor, and the people may cherish a just pride in the attainments of those who have pursued their course of study; in fact they may be excellent colleges, but if they are not *training schools for teachers*, and if every thing else be not kept subordinate to the specific object for which they were founded, the result will be disastrous, not only to these schools, but to our whole educational system. The success of Normal Schools in other States—while it has been such as to warrant a hope that the policy we have inaugurated may be successfully carried out—has not been so marked and so uniform as to assure us that we shall not encounter difficulties that prudence, forecast and energy alone will enable us to overcome."

STATE NORMAL SCHOOL AT PLATTEVILLE.

The State Normal School at Platteville was opened October 9th, 1866. It occupies, for the present, the building formerly known as the Platteville Academy, which cost about \$20,000. Adjoining buildings are now in process of erection which will be ready for occupancy in 1868, and will cost \$15,000 or more.

The Faculty of Instruction already appointed includes three gentlemen and two ladies. Charles H. Allen is Principal.

ADMISSION OF STUDENTS.

The Board of Regents of Normal Schools has adopted the following regulations for the admission of students to any State Normal School:

1. Each Assembly district in the State shall be entitled to six representatives in the Normal Schools, and in case vacancies exist in the representation to which any Assembly district is entitled, such vacancies may be filled by the President and Secretary of the Board of Regents.

2. Candidates for admission shall be nominated by the County Superintendent of the county, (or if the County Superintendent has not jurisdiction, then the nomination shall be made by the City Superintendent of the city,) in which such candidates may reside, and they shall be at least sixteen years of age, of sound bodily health, and good moral character. Each person so nominated, shall receive a certificate setting forth his name, age, health and character, and a duplicate of such certificate shall be immediately sent by mail by the Superintendent to the Secretary of the Board.

3. Upon the presentation of such certificate to the Principal of the State Normal School, the candidate shall be examined under the direction of the Principal of said school, in the branches required by law for a third grade certificate, except History and Theory and Practice of Teaching, and if found qualified to enter the Normal School in respect to learning, he may be admitted, after furnishing such evidence as the said Principal may require, of good health and good moral character, and after subscribing the following declaration:

"I ——— do hereby declare that my purpose in entering the State Normal School is to fit myself for the profession of teaching, and that it is my intention to engage in teaching in the schools of this State."

4. No person shall be entitled to a diploma, who has not been a member of the school in which such diploma is granted, at least one year, nor who is less than nineteen years of age; and a certificate of attendance may be granted by the Principal of a Normal School to any person who has been a member of such school for one term, provided, that in his judgment such certificate is deserved.

COURSE OF STUDY.

The instruction is adapted to those who design to teach, and hence is thorough and comprehensive. The discipline is such as to secure self-control, and to promote respect for law and order. Certificates of attendance will be given to those who attend the school for at least one term, and to those who shall attend at least one year and pass an examination, a diploma will be granted. Section 13 of chapter 116 of the general Laws of 1866, provides that "After any person has graduated at the State Normal School, and has taught a public school in this State one year, the Superintendent of Public Instruction shall have authority to countersign the diploma of such teacher, after such examination, as to moral character, learning, and ability to teach, as to the said Superintendent may seem proper and reasonable."

Section 14 provides, that "Any person holding a diploma granted by the Board of Regents of Normal Schools, certifying that the person holding the same is a graduate of a State Normal School, and that he is qualified to teach a common school, shall, after the same has been countersigned by the Superintendent of Public Instruction, as provided in section 13 of this act, be deemed

qualified, and such diploma shall be a certificate of qualification, to teach in any common school of this State, and as such shall have the full force and effect of a first grade certificate, until annulled by the Superintendent of public Instruction."

The Board is authorized by section 12 of chapter 116, to provide lectures on Chemistry, Anatomy, Physiology, Astronomy, the Mechanic Arts, Agriculture, and on any other science or branch of literature that shall be deemed proper, and it is the design to afford such facilities for acquiring knowledge as will enable those who wish to fit themselves to teach, to save both money and time by availing themselves of the advantages of a Normal School. All students will be taught *how to teach*, by being required to *do* in the experimental school, what they must afterwards do in the public school.

In professional training, lectures are given daily in some one of the following subjects, viz: proper course of study and training in public schools; methods of instruction and school government; and the students prepare essays and reviews of these lectures.

There is a Model School connected with the Normal School, in which the Normal students practice teaching during the last year of the course.

The Scholastic year is divided into three terms: the first to commence on the first Tuesday of September, and to consist of sixteen weeks; the second to commence on the Tuesday succeeding New Year's day, and to consist of fourteen weeks; and the third to consist of ten weeks and to end on the last day of June.

Students nominated by County or City Superintendents will be admitted at any time during the term.

To all persons, residents of this State, if found qualified to enter a State Normal School, tuition is free. Board may be obtained at reasonable rates—from \$2.25 to \$3.25 per week. A small charge, of from 75 cents to \$1.25 per term, is made for the use of text books.

It is expected that, for the present, the Normal Schools of Wisconsin will do most of their work upon the State at large, through under-graduates. Teachers of some experience will come up and stay one, two, or three terms, to attend the lectures on teaching, and to be present at and receive the training of the classes.

STATE NORMAL SCHOOL, WINONA, MINNESOTA.

MINNESOTA STATE NORMAL SCHOOL,

AT WINONA.

HISTORY.

THE Legislature of Minnesota, in 1858, passed an act directing the Governor to appoint a Normal Board of Instruction, consisting of a Director in each of the six Judicial Districts of the State, to whom was intrusted, under certain restrictions, the establishment of three State Normal Schools. The statute provides that, "There shall be established within five years after the passage of this act, an institution to educate and prepare teachers for teaching in the Common Schools of the State, to be called a State Normal School, and also within ten years, a second Normal School, and within fifteen years, a third, provided that there shall be no obligation to establish either of the three schools, until the sum of five thousand dollars is donated to the State in money and lands, or in money alone, for the erection of necessary buildings and for the support of the professors or teachers in such institutions; but when such sum is donated for such purpose, a like sum of five thousand dollars is appropriated by the State, for the use and benefit of such institutions."

The Normal Board at its first meeting in the capital, August 16th, 1859, formed the six Judicial Districts of the State into three Normal Districts.

The citizens of Winona, having offered a subscription of seven thousand dollars on condition that one of the schools should be located there, the offer was accepted by the Board and the first State Normal School of Minnesota was established at Winona.

This school was organized in September 1860, and continued in operation until the Spring of 1862, when it was suspended owing to the embarrassments growing out of the war and no appropriations for its support were made for the two years ending with 1863.

At the session of the Legislature for 1864, a permanent annual appropriation was made for its support as follows: \$3000 for the year 1864, \$4000 for 1865, and \$5000 annually thereafter. The school was reorganized and reopened under the direction of the present Principal on the first of November 1864, since which time it has steadily increased in prosperity and influence. It is now exerting a powerful influence upon the cause of public education throughout the State. In the year 1866, an appropriation of \$10,000 was made toward the erection of a suitable building. In the winter of 1867, a second appropriation of \$50,000 was made for the building. In addition to this sum, the city of Winona has already appropriated and pledged \$25,000 for the same object. One of the finest Normal School edifices in this country is now (1867,) in progress

for the use of the school. Its extreme dimensions are about 85 by 166 feet, and it is four stories high including a high basement. The building includes all the apartments and accommodations necessary for a first class training school for teachers, and it is expected to be completed in the year 1869.

John Ogden was the first principal. He remained in charge of the school until its suspension in 1862. On its reorganization in 1864, Prof. W. F. Phelps, for many years at the head of the Normal School of New Jersey, was appointed principal.

CONDITIONS OF ADMISSION.

1. Applicants must be at least 16 years of age, and must present to the principal satisfactory evidence of good moral character, of sound bodily health and of special adaptation to the office of teacher.

2. They are expected to sustain a fair examination in Reading, Spelling, Writing, Geography, Arithmetic and the elements of English Grammar.

3. They must be willing, if admitted, to declare in writing, their intention to teach in the Common Schools of this State, for at least two years, and sign an agreement to report themselves to the principal semi-annually, by letter, for the aforesaid period of two years, after having left the Institution.

4. At least three pupils will be received from each senatorial district, as now existing under the laws of the State. The number will be limited only by the capacity of the school to accommodate students. In case there should be vacancies in any of the districts, they may be filled by applicants from other districts, provided such applicants present themselves within ten days from and after the opening of a term.

5. Candidates are required to be present promptly at the opening of the term. They will not be received for less than one term, and once admitted, they will be entitled to the privileges of the school, until honorably discharged, or until their rights shall have been forfeited by unauthorized absence or other misconduct.

The examinations for admission are conducted by the principal and his assistants.

COURSE OF STUDY.

The studies indicated are arranged as far as possible according to their natural affinities, and not according to the order in which they will be prosecuted by the student.

English Language.—Elementary sounds of the language; pronunciation; spelling; analysis and definition of words; reading and elocution; grammar, including the analysis, synthesis and classification of sentences; composition; rhetoric and criticism; English literature; *the best method of teaching the above.*

Mathematics.—Number, its properties and laws; intellectual and written arithmetic; form, the facts of geometry; theoretical and practical geometry; elements of algebra; book keeping; surveying and civil engineering; *best methods of teaching the above.*

Physical and Natural Sciences.—Natural philosophy; physical and political geography; chemistry; botany; natural history; human philosophy; geology; elements of agriculture; astronomy; *methods of teaching the above.*

Graphics.—Principles and practice of penmanship; isometric and perspective drawing; object drawing; industrial drawing; topographical drawing; drawing applied to illustrative teaching; *best methods of teaching drawing.*

Political Economy.—Science of Government; Constitution of the United States and of Minnesota; lectures on the resources of the United States and Minnesota; history of the United States.

Theory and practice of teaching.—Intellectual and moral philosophy; lectures on the principles of education; history of education; didactic exercises or sub-lectures; observation in model school; preparation of sketches; criticism, lessons in teaching; teaching in practice school; school laws of Minnesota.

The course will require three years. It is at present only partially carried out owing to the urgent demand for qualified teachers for the district school. The average duration of the course as now pursued is two years. The school is divided into four classes designated A, B, C, and D, and to each class are assigned four exercises per day besides the lesson in vocal music and the "criticism teaching exercise." Each class has one study hour during the daily session, and every student is required systematically to arrange his hours out of school and make weekly reports to the principal.

The most careful and constant attention is given to the development of clear ideas, methodical habits of thought and exact expression, and to the cultivation of those traits of character essential to success in teaching. The special object of the school is ever kept prominently before its pupils.

The plan of the institution comprises both a graded model and a graded practice school of not less than four departments each. This plan cannot be fully carried out until the new buildings are complete. There is at present a model school of three grades, primary, intermediate and grammar, each under a permanent teacher. Each of these departments accommodates 40 pupils who pay a quarterly tuition fee of \$7.50, seven dollars and fifty cents. From these tuition fees the model school is supported, being no charge whatever upon the State.

Into these model schools the pupil-teachers of the Normal School are sent carefully to observe and take note of the discipline and methods of instruction, and are afterwards critically examined upon the subject. Classes from the Model Schools are also daily brought before the Normal School to receive criticism lessons at the hands of the pupil-teachers of the latter.

These Model Schools are entirely under the control of the Normal School and are an integral part of it. They are entirely independent of the local school system. The precise amount of observation and practice to be obtained by the pupil-teachers is not yet fully determined, but they are part of the daily work throughout the entire course.

The number of pupils in the Normal School is at present limited by the narrow accommodations afforded the institution. The total number instructed last year was 80. Of these 13 were males and 67 females. In the Model Schools there were during the year 164. Two classes were graduated last year, numbering 16 and 14 persons respectively.

BOARDING ARRANGEMENTS.

No special arrangements have yet been provided for boarding the pupils. They are now accommodated in private families where they enjoy all the comforts and influences of the family relation, at a cost of from \$3.50 to \$4.50 per week. Special arrangements however are under consideration by which the expenses of the student will be much reduced.

EXAMINATIONS.

Monthly written examinations of the classes are held, to determine the progress and standing of each student. These examinations are a review of the subjects passed over during the month.

The final examinations are held during the week preceding the last week of a semi-annual session, and they determine the *status* of the student in respect either to graduation or to his classification during the succeeding term.

The public examinations are held during the last week of each semi-annual session, and their sole object is to keep alive public interest in respect to the claims of true education. The public are cordially invited to attend these examinations, as well as to visit the school at all times.

PRIVILEGES OF STUDENTS.

Students completing in a satisfactory manner the prescribed course of study and training, receive a diploma entitling them to teach for a period of five years in this State, without examination by the local school officers.

There is no charge for tuition.

All necessary books and stationery are supplied to the student on payment by him of five dollars for each semi-annual session.

Such miscellaneous and reference books as belong to the library of the institution are loaned to the student under proper restrictions.

The Normal School is well supplied with maps and geological charts.

Considerable progress has also been made in the collection of minerals and fossils illustrating the geology and paleontology of Minnesota.

Sufficient chemical apparatus also for the illustration of the course in that department has been secured. To all these important aids, the students have free access.

GRADUATING THESES.

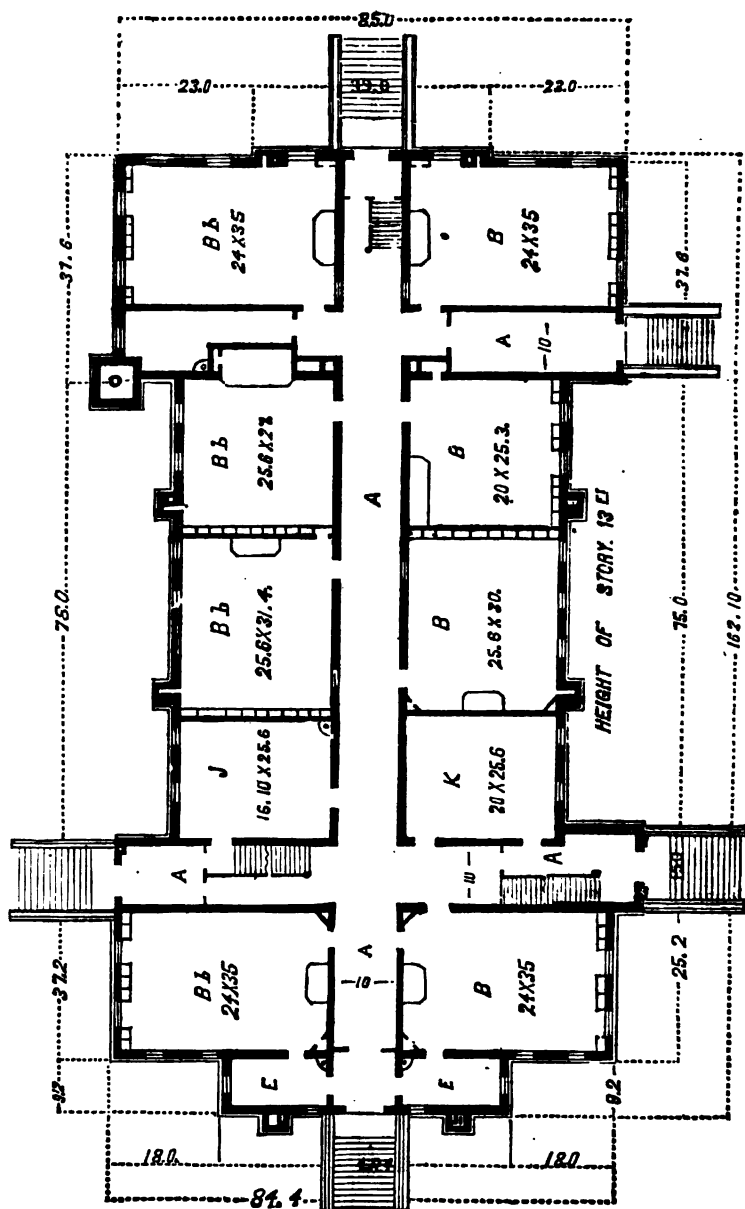
All candidates for graduation are required to prepare and defend a Thesis upon some subject assigned by the Principal, which has an immediate relation to the studies and exercises of the course.

It must be fully elaborated in accordance with instructions given for the purpose, and, when the subject admits of it, must be accompanied by the necessary illustrative or working models and designs, suitable to its clear and forcible elucidation.

The Theses, with the accompanying drawings, models, etc., are deposited for permanent preservation among the archives of the school.

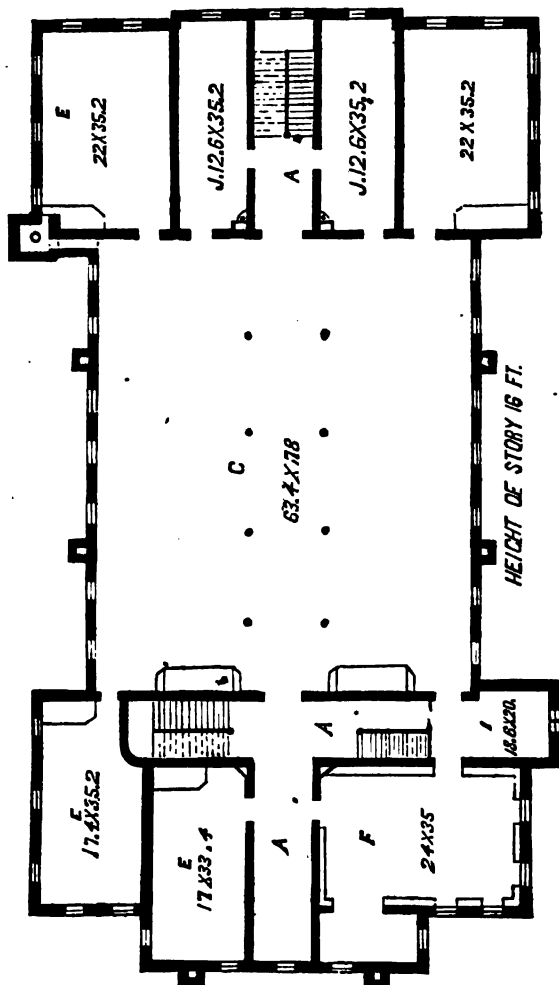
The results of the final examinations, together with those of the record of daily attendance, are published in the annual reports to the Legislature, for the purpose of exhibiting to the people the standing of each student in respect to deportment, scholarship, and professional capacity.

No student who fails to pass the prescribed examination at the close of a semi-annual session is allowed to advance with his class, but is required to review the studies in which he is deficient, in case he remains in the school.



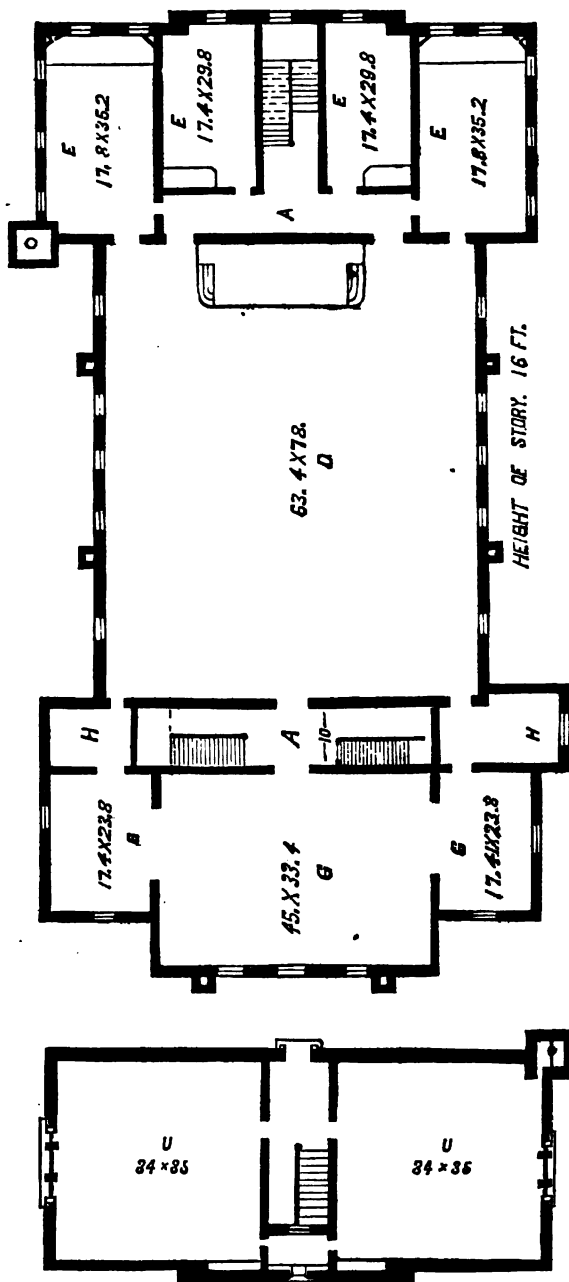
FIRST STORY.

- A A. &c.—Corridors.
 B B. &c.—Model School-rooms.
 J.—Dentist's Clinic-room.
 B B. B. &c.—Practice School rooms.
 K.—Reception-room.
 W. W.—Wash-rooms.



SECOND STORY.

- A A.—Corridor.
 C.—Normal Assembly-room.
 E E.—Class-rooms.
 F.—Library.
 J J.—Ladies' Wardrobe-rooms.
 L.—Principal's office (main tower.)



THIRD STORY.

A A.—Corridor.

D.—Normal Hall.

E E, G, &c.—Class-rooms.

G G, H H, &c.—Natural History rooms.

FOURTH STORY, (west wing)

WW.—Drawing-room and Art Gallery.

CALIFORNIA STATE NORMAL SCHOOL.

THE foundation of the Public School System of California was laid in 1849. Ten years after, the Superintendent, Hon. Andrew J. Moulder, recommended among other measures of improvement, the establishment of a State Normal School. He still further urged this measure in 1860, and in 1861 asked for a direct State appropriation of five thousand dollars for such school.

In 1862, the Legislature passed an act establishing a State Normal School in the city of San Francisco, and made an appropriation for that purpose of \$3,000. The appropriation for 1863-64 was \$6,000, and for 1864-65, \$8,000.

The Normal School was opened in a class-room of the San Francisco High School building, on the 23d day of July, 1862, under the superintendence of Mr. Ahiru Holmes, who continued Principal until July, 1865. Mr. George W. Minns was elected Principal in June, 1865, and took charge of the school on the 10th of July, following.

The general character of this school and the aim of its officers may be seen by the following extract from the first report of Mr. Minns to the Trustees in 1866. He says:

Normal Schools are not high schools or academies, established for the purpose of enabling a certain number to pursue the higher branches of learning; but their object is direct, plain, and practical; it is to benefit the people at large, by providing for the common schools a class of well trained teachers. The course of study is therefore at present almost entirely restricted to those branches which are taught in the common schools. And this is, in my opinion, as it ought to be. The Normal School was never intended to attempt to give an extended course of instruction in the arts and sciences, or in the languages; but its purpose is—by rendering its pupils thoroughly acquainted with the fundamental branches of a good English education, by familiarity with the best methods of teaching, by a knowledge of the principles and methods of human culture, and of the true order of study, by endeavoring to give them an insight into human nature, so as to enable them to perceive the best methods of government and discipline, and, lastly, by their applying what they learn in the actual teaching and governing of classes in the training school—its purpose is, by these means, to send into the common schools throughout the State a class of teachers whose excellence, ability, and aptitude for teaching will be at once felt and acknowledged. I have no doubt, also, that the Normal School, as it increases the number of its pupils, will, in course of time, cultivate an *esprit de corps* among its members which will be beneficial alike to teachers and to the community. No one can fail to see the advantages that will result to the cause of education from having dispersed over the State teachers who are mostly graduates of one institution, and therefore feel a friendly interest in one another's success and welfare, who would often correspond and interchange opinions concerning the best methods of advancing the cause in which they were all engaged.

It must not be forgotten, moreover, that our State Normal School is and will be the principal means of enabling our own citizens, who design to become teachers, to compete with the graduates of Eastern Normal Schools.

In September, 1865, the Normal School was removed to a building which is occupied entirely by the different departments of the school.

The upper part of this building is occupied by the Normal School, and the lower by the Training School, of four classes, directed by Mrs. C. W. Stout and Miss H. M. Clark. Four pupils of the Normal School are detailed in turn every week to instruct and govern these classes, under the supervision and with the assistance of these experienced and accomplished teachers. The Normal School now possesses greater advantages in this respect than it ever did before. The practice in teaching, which members of the school will have in the course of a year, will be of incalculable benefit to them.

Upon the organization of the school in July, 1865, forty-one pupils in all were admitted to the different classes, making the whole number in the school eighty-five.

Since the establishment of the school there have been entered upon the register two hundred and sixty-two names. These represent nearly every county in the State. The majority have not remained long enough in the school to obtain a diploma. This is owing to various causes, the principal of which is, the want of means to defray the expenses of board and lodging while attending the school. Young men and women have told me of their earnest desire to continue longer in the school, but have stated that it was absolutely necessary for them to do something to support themselves, and have left to take positions as teachers; others enter merely to become acquainted with a certain branch, and, as soon as their object is accomplished, leave, never having been candidates for a diploma; while still others change their plans in life, and engage in some other occupation.

All pupils, before being permitted to join the school, are required to subscribe to the following:

"We hereby declare that our purpose, in entering the State Normal School, is to fit ourselves for the profession of teaching, and that it is our intention to engage in teaching in the public schools of California."

KANSAS STATE NORMAL SCHOOL

AT EMPORIA.

HISTORY AND ORGANIZATION.

PRELIMINARY steps for the organization of a Normal School in Kansas were taken by the Legislature of 1863; the location of the School was fixed upon, and it received an endowment of thirty thousand three hundred and eighty acres of salt lands, but as these lands were not sold, the School received no income from them.

The Superintendent of Public Instruction, Hon. Isaac T. Goodnow, in his report for 1863, recommended the full equipment of the School. He says: "Hitherto most of our teachers have only taught as a temporary employment—as a mere stepping stone to something that *pays better*. Whatever education they may have received was not with special reference to teaching.—As a general thing, teaching is a failure. For preparation for the specific business of teaching, we look to the Normal School."

The subject was discussed by the friends of education in various ways, and the institution was finally established by the Legislature, and located at Emporia in 1864, but was not fully organized till the fifteenth day of February, 1865, when eighteen students were gathered in a room belonging to the district-school of Emporia, with a single teacher, to commence the work of Normal Instruction in this State. The number increased till forty-two were enrolled before the close of the term in June. The Board of Visitors, of which Judge L. D. Bailey, of the Supreme Court, was chairman, presented an able report to the Legislature, which did much toward confirming public opinion in favor of the School.

The second term began in September with sixty students. There were eighty-five students in attendance during the first year. The School, though opened as an experiment, was demonstrated an entire success before the close of the first year. The closing exercises were fully attended by distinguished educational men from different parts of the State, and an account of these exercises published in most of the Kansas papers.

In 1865, by reason of the increasing number of students, making the apartments then in use entirely inadequate to the wants of the School, it was decided to ask the State for an appropriation to construct a building which, answering the purpose of the school for a few years, might then be set apart for the use of the Model School department without loss to the State. The Legislature very willingly acceded to the request, and authorized the Board of Directors to construct a suitable edifice at the State's expense. The building is arranged with special reference to the wants of a teachers' school, and will prove well adapted to the pur-

poses for which it was designed. Utility and economy of construction were before the minds of the Board of Directors, rather than beauty and architectural finish, but still the latter were not ignored.

The cost of the building and equipments was \$18,000. It was dedicated January 2d, 1867. The following passage is taken from the address of President Horner, of Baker University, at the dedication :—

In the erection of these massive walls, in the completion of this fair fabric—this ornate temple of learning, the intelligence of our people and the wisdom of our legislators have forged another and the brightest link in our educational system. Intimately connected as it is with the welfare and success of our common schools, the grand basis upon which rests the superstructure of our educational system, and the crowning glory of our civilization, it is and must ever continue to be the pride and glory of our people. Already is it infusing into our common schools the healthful, invigorating influence of its teaching. It will elevate the teacher's humble calling to its proper place in the ranks of the learned professions. Its mission is to supply skillful, trained, disciplined, *professional* teachers for the thousand schools of the State. We only need these to develop in our State a system of education that shall reflect immortal honor upon its founders.

The Normal School is under the supervision of a Board of Directors which consists of nine persons—the Governor, State Treasurer, State Superintendent of Public Instruction, and six other persons appointed by the Governor for a term of three years.

The appropriations to the school in 1866 were \$14,000, to finish the building, and for current expenses. From \$5,000 to \$6,000 were required in 1867.

The school has some thirty-eight thousand acres of valuable land, known as the "salt lands," lying principally in the Western part of the State, for an endowment. The interest of the principal arising from the sale of this land is to be used for the maintenance of the school from year to year. At present the land is not available in this way. Nor will it be advisable to sell it too soon. Being near the line of the Pacific railroad, and containing, as it is confidently believed, valuable mineral deposits, it may be made a source of no small revenue to the school, if a favorable time be chosen for its sale, and judicious contracts made. Until this sale is effected and the proceeds carefully invested, the support of the institution will be due to the annual appropriations made by the Legislature. That these will be in keeping with the requirements of the school, there is every reason to believe, judging from the past action of that honorable assembly, the growing popular sentiment in its favor, and the general fact that Normal Schools have been adjudged necessary to the highest efficiency of the free school system with which Kansas, in common with other States, is favored.

The Faculty of Instruction at present comprises a Principal, Associate Principal, and one lady teacher. L. B. Kellogg is Principal.

ADMISSION OF STUDENTS.

The terms of admission are given in the following extract from the Organic Act, Sec. 9 :—

That each representative district in this State shall be entitled to send one pupil each term of said school, said pupil to be recommended by the representative of the district to the Board of Directors; the person thus recommended shall be admitted free of tuition. *Provided*, the applicant shall be of good moral character and shall sustain a satisfactory examination, and sign a declaration of intention to follow the business of teaching common schools in this State, (as long as he or she shall remain in the school as a student.) *And provided further*, That pupils may be admitted without signing such declaration of intention, on such terms as the Board of Directors may prescribe.

Students are required to be, if males, seventeen, and if females, sixteen years of age. This rule may be suspended in favor of pupils who intend to complete the course of study before teaching, and manifest sufficient maturity of mind.

This rule has been suspended in a few instances, but never in such a way as to reduce the average age of the students below the maximum.

It was foreseen by the Board of Directors that, at the first, there would be many districts unrepresented. To meet this condition of affairs and enable the school to commence educating a fair number of teachers, it was decided that, for the present, "All students who pledge themselves to become teachers, will be admitted free of tuition: *Provided*, the whole number so admitted does not exceed the number of representative districts in the State; *And provided*, that a small entrance fee be required of each at the beginning of every term." Pupils admitted to the school are entitled to its privileges until they graduate, unless they forfeit this right by voluntary absence, by improper conduct, or by failing to exhibit evidences of scholarship and fair promise of success as teachers. The pledge above referred to is here given:—

TEACHER'S PLEDGE—I hereby declare that it is my intention to become a teacher in the schools of this State, and that my object in attending the Normal School is the better to prepare myself for this important work.

The construction put upon the pledge is this: that the student is to teach as long as he studies in the school; that is, if he enjoys the benefits of the school the full three years required to take all the studies, he must teach three years. After this, the teaching is voluntary. For shorter times, in the same way.

COURSE OF STUDY.

The Course of Study has been adjusted so as to include, as it is believed, all the studies to which teachers of our public schools most need to direct their attention. Arithmetic, algebra, geometry, trigonometry, astronomy and natural philosophy, reading, spelling, writing, grammar, rhetoric, composition and literature, geography and history, chemistry, physiology, botany, geology and zoölogy, singing and drawing, with *theory and art of teaching*, constitute the studies.

Six terms are occupied with the study of the science, method and history of education. The course takes a somewhat wide range, and includes: 1. The organization and classification of schools. Programme of daily exercises. The recitation. School government. Motives. The incentives which a teacher may allow to act upon himself or his pupils. The conscience—how it should be educated. 2. The order, in time, of the development of the mental faculties, and the exercises best adapted to encourage their growth. The special purpose of each faculty, and the means to train it. Laws of bodily health: Ventilation, posture, gymnastics. Formation of courses of study. Mental philosophy precedes and is made the basis of instruction in this part of the course. 3. History of systems and methods of education. Biographies of eminent teachers. 4. Primary instruction. Object teaching. Grading of schools. Drill exercises in teaching. Observation and practice in the Model School. 5. The Constitutions of the United States and of the State of Kansas. Duties of teachers as citizens. 6. The school laws of Kansas. School supervision and school man-

agement. School-house architecture. Practice in the Model School. General teaching exercises in the Normal School.

As the course is arranged, it will be necessary for students of average ability and industry to remain in the Normal School three years before graduation. The diploma of the institution is granted only to those students who complete the full course of study and training, and give evidence of fitness to teach. It is very desirable that students remain in the school until they graduate; but pupils are received for shorter times; none, however, for less than one term. Tuition is free.

Students are admitted only at the beginning of each term, unless there be special reason why the rule should be departed from.

A contingent fee of five dollars a year is required of each student, to meet incidental expenses.

The Model Department is established in order to give the Normal students an opportunity to witness the actual working of a school conducted in accordance with those principles which enlightened experience has shown to be best for the education of boys and girls, and also to give them practice in actual teaching under the supervision of the instructors of the Normal School. It is the design to make the school in every way a *model* for teachers.

The number of students in the Model School will be limited to thirty. They will be of two grades, viz.: students nearly old enough and not quite sufficiently advanced to enter the Normal School; and, second, boys and girls of from ten to thirteen years of age, who have had fair opportunities for education. Students will be received from all parts of the State. Obligation to teach is not made a condition of admittance. Tuition at the rate of \$6.00 a term will be charged. This school will be under the direct supervision of the Principal.

Thus far board has been obtained in private families at about \$4.00 per week, exclusive of lights, fuel and washing; or in clubs, or self-management, at lower rates.

One of the serious hindrances to the progress of the school has been found in the high prices paid by the students for board, to which should be added the difficulty of obtaining board at any price. To supply students with the privileges of a home at reduced cost, a joint stock company, known as the Normal School Boarding House Association, has been incorporated, whose purpose is the construction of a commodious edifice to be used by Normal students as a boarding-house. Stock to the amount of some eight thousand dollars has been taken, and the building commenced. The result of having such a house can not be otherwise than beneficial to the school. The credit of originating this enterprise, and prosecuting it thus far, is due, in great measure, to the Rev. G. C. Morse, the authorized agent of the Association.

The number of students the last year was 180. Whole number, 250.

Number of graduates 2. Number in Model School, 27.

Nearly all the text-books used by the pupils are supplied by the State.

Any pupil who has contracted vicious habits, or who does not cheerfully comply with the requirements of the school, will not be allowed to remain in it as a member.

Connected with the school there is a well-conducted Literary Society, which gives opportunity for social and refined culture.

A Bible Class, conducted by a member of the Faculty, is sustained by the students.

Physical exercises are taken daily.

Students who wish, have opportunity to take music lessons.

MAINE STATE NORMAL SCHOOLS.

HISTORICAL DEVELOPMENT.

THE Legislature of Maine, by an act passed July 27th, 1846, constituted a Board of Education composed of twelve members.

This Board, at its first meeting in December, 1846, appointed its Secretary, and also a committee on the qualification and education of teachers. The Board and its Secretary in their first report recommend the adoption of measures which should help to secure better qualified teachers. The committee of the Board appointed to examine the subject advised that the State be enlightened by public addresses and lectures, and say that "when these measures have done their work upon the public mind, it may be hoped the time will have arrived when a State institution for the qualification of teachers may be established and amply endowed. The Secretary of the Board, W. G. Crosby, in his report for 1849, asked for an appropriation from the income of the permanent school fund for the support of Normal Schools.

In 1854, a law was passed, providing for the appointment of a Superintendent of Common Schools. This officer, Hon. C. A. Lord, in his first report, dated December, 1854, advised the establishment of Normal Schools as the only permanent remedy for incompetent teachers. His successors, Hon. Mark H. Dunnell in 1855, 1857, 1858 and 1859, and Hon. J. P. Craig in 1856, in their annual reports presented urgent reasons for the organization of a Normal School for the State. Mr. Dunnell in one of his reports gave a history of Normal Schools in other States and countries, and pointed out their influence upon public schools, and the satisfactory results which had already been obtained. Teachers' Institutes had been held for several years, but though accomplishing much in the improvement of teachers, "they had proved inadequate to meet the demand for higher qualifications and that thorough preparation deemed essential to the prosperity of Common Schools."

To meet this increasing demand, the Committee on Education, in 1860, reported a bill providing for the education of teachers in eighteen different academies. This bill was passed by the Legislature, and eighteen hundred dollars appropriated at once, and thirty-six hundred dollars, annually thereafter, to carry out the provisions of the act.

Sixteen academies accepted the provisions of the bill, and provided for distinctive Normal instruction. Five hundred and sixty-six young

ladies and gentlemen received the advantages of this normal arrangement in the Autumn of 1860, two hundred and sixty-four in the Spring, and five hundred and eighty-five in the Autumn of 1861. This plan of educating teachers was not thought successful, and in 1861, the Superintendent of Common Schools, Hon. E. P. Weston, recommended to the Legislature the repeal of the law, and the establishment of Normal Schools. The system was accordingly abolished in 1862, and an act passed to carry out the recommendation of the Superintendent.

The act provided for two Normal Schools, one in the Eastern and one in the Western part of the State. These schools were "to be thoroughly devoted to the work of training teachers for their professional labors," "including the best methods of government and instruction."

Three Commissioners were appointed by the Governor to locate the proposed schools. Propositions were received from the Trustees of Academies, and from citizens, offering to furnish the necessary accommodations. The Commissioners, after visiting the localities from which these propositions were received, and comparing their specific advantages, decided to locate the Western Normal School at Farmington, and the second or Eastern Normal School at Castine.

The advantages expected to be derived from Normal instruction are thus set forth by the Superintendent, Rev. Edward Ballard:—

The opinion has been but too prevalent, that a High School or Academy can qualify teachers as well for their work as the institutions specially established for this purpose. But it is to the credit of the Normal methods, that in some of our higher literary institutions, classes have been formed with distinct reference to this plan. It is also to the credit of the intelligent perception of their value, that these methods are thus made a part of the instruction. Doubtless too in the ordinary use of High and Academic instruction, and with a Normal class added to the whole order, very large substantial benefits have been received for educational use. But it must be a fallacious supposition to consider, that the discipline in either of these cases can be equal to the regular, systematic and thorough drill of the full proposed Normal course.

It would be more than well if all the pupils admitted to our Normal Schools could have the preparation acquired in our best High Schools; so that here there would be only the unfolding and application of the Normal principle, and a shorter stay required under this tuition. But as we can not exact this condition for entrance, until the schools in the State are raised to a much higher grade than at present, the Normal School must teach, first the lessons to be taught, in the way of a thorough review, and then teach how they are to be taught; or, in other words, knowledge and the methods of imparting it.

The usual length of the course in our country is two years. The second is the one most profitable for the future teacher. As there still seems to be a want of information in some parts of the State on the design of these institutions, it may be proper to place on these pages some of the purposes to be reached, in coming to the great object proposed.

1. The increase of the pupil's power to teach, in whatever branch of common school study he is hereafter to be employed. The training is designed to make him thorough in the knowledge of his department. It is not merely to acquire information that he is enrolled as a student; but he is expected, under the discipline, to master the separate subjects, so as to be able without confusion of thought or perplexity of manner, to transmit to others what he knows and as he knows it. Hence great care is taken that in description, direction or explanation, right words shall be used, and none superfluous, to convey the exact idea.

2. To place education in the teacher's mind, on a scientific basis. No subject can be well taught without the adoption of certain principles, that will be the

same to direct, whenever the same subject comes up again. These principles will mark out the line of his procedure. He will know what to do and why he does it. Rules will grow up spontaneously for his own use; and in their influence, will enter the minds of his future pupils, even without the written formula.

3. Hence, too, will come *methods* of teaching, which are derived from the wisdom and experience of the best teachers, here brought together, to save the labor of learning through years of toil by the like experience. One of the great excellences of the Normal School is this collection of practical wisdom. These methods will be adapted to the various ages of the scholars in the Primary, and so upward, through the Intermediate and Grammar to the High Schools.

4. And as the result of these combined influences, the adaptation of mind and manner to the actual work of the school-room. The common modes of teaching in our schools and academies have had reference mainly to the acquisition of facts, principles and rules; the study of lessons, their recitations, and where teachers have been prepared for the purpose, the illustration of the lesson by pertinent explanations. When the pupils have gone out as teachers, they carry the methods taught. In too many instances they have perpetuated the insufficient habits of several generations. It is chiefly because the improved modes, proceeding from the Normal Schools of New England, have largely entered into the instruction, that better methods have been partially introduced. How much better will it be, when the skill of every teacher, in the application of his knowledge to practice, shall have been attained by a course of study and discipline specially suited to the right accomplishment of his work. With some Normal Schools a Model School is connected, taken from the neighborhood of its location, where the Normal pupils become teachers, under the guidance of their instructors. In others the like benefit is gained in a different way; where the pupils in rotation take the position of the teacher of their own class.

STATE NORMAL SCHOOL AT FARMINGTON.

The buildings prepared for the Normal School at Farmington consist of a substantial brick edifice, sixty feet long, forty feet wide, and two stories high, with a tower, and the original academy building, which now forms a rear extension. There are accommodations for three hundred students, furnishing suitable assembly-rooms, class-rooms and halls. George M. Gage is Principal.

This school was opened on the 24th of August, 1864, in a hall prepared for its temporary accommodation. There were thirty students present at the beginning of the school; this number was increased to fifty-nine, before the close of the term.

CONDITIONS OF ADMISSION.

The "students are required to be at least sixteen years old, if females; and seventeen, if males."

All applicants must pledge themselves to render service to the State by teaching one year at least, if opportunity offers; and for two years after graduating, in case they complete the full term of study.

All candidates for admission must be prepared to sustain a creditable examination in reading, writing, arithmetic, grammar, geography and history of the United States, and must produce satisfactory evidence of good moral character.

The course of study is prescribed for two years, as follows:

First Year.—Spelling, oral, phonetic and written. Reading, with careful training in the analysis of sounds, enunciation and expression. Arithmetic, mental and written, analytic and formulary. Geography, physical and political,

with map drawing and use of the globes. History, American and foreign, so far as is consistent with other studies. English Grammar, including the analysis and composition of the language. Natural philosophy and physiology. The Constitution of Maine, the school laws, and good manners.

Second Year.—Algebra, book-keeping, English literature, chemistry, astronomy, geometry, rhetoric, intellectual and moral philosophy, the theory and art of teaching, and the Constitution of the United States. The Latin and French languages are allowed as optional studies, if students have already made the requisite previous attainments. Students in the first year, as well as those in the second, will receive constant instruction in methods of teaching and school government; and those in the second year will spend more or less time in reviewing the elementary branches of the first year, as circumstances may require.

GENERAL EXERCISES in gymnastics, singing, public speaking and composition, will receive their appropriate attention. The reporting and analysis of lectures delivered to the classes, and the preparation of criticisms, will occupy a portion of the student's time. A voluntary, literary association, with its usual variety of exercises,—a kind of Normal Lyceum,—is already in successful operation.

Every pupil who shall complete the course of study with satisfaction to the faculty and examiners, and who shall exhibit skill in imparting instruction and fair promise of success in school management, will receive a Diploma, certifying his attainments, and signed by the Principal, Superintendent, and Governor of the State; and it is expected that such Diploma will be made a State certificate, exempting the holder for a term of years from the necessity of examination by town committees.

The object of the Normal or training school is to prepare teachers for their very important work; to give them the aid of skillful instructors, in acquiring a careful knowledge of the branches to be taught, and of the best methods of imparting that knowledge to others; to give them opportunities within their own classes, or in experimental schools, to practice the art under the eye of teachers, who will constantly point out their failures and suggest the means of overcoming difficulties.

In the Normal School the whole intent of the instruction is to give and receive correct ideas, fresh impulses and new enthusiasm upon all subjects of school management, including instruction and discipline. With such an aim it would be strange, indeed, if no more were gained toward the professional qualification of its students, than in an institution whose objects are miscellaneous, and whose efforts must consequently be divided.

RESULTS.

The school has been prosperous and its results gratifying. The number of pupils connected with the school during the Winter of 1866-67 was seventy-five; in the Spring term of 1867, one hundred and thirty-nine; in the Autumn term of the same year, one hundred and seventeen. At the close of the Spring term, thirty-two graduated.

STATE NORMAL SCHOOL AT CASTINE.

This Normal School was opened the first of September, 1867, in a building well constructed and arranged for the purposes of the school. G. T. Fletcher was appointed Principal. The school is under the same general supervision as the one at Farmington.

The conditions of admission for students, and the course of studies, are also the same as in that school. Thirteen students were registered the first term; this number was increased the second term, commencing in December, 1867, to twenty-five.

As the design of the school and its advantages to teachers become known in the Eastern part of the State, it is believed that its numbers will be largely increased.

MARYLAND STATE NORMAL SCHOOL

AT BALTIMORE.

HISTORY.

THE State Normal School of Maryland was established by the Board of Education in pursuance of the following provisions of the School Code of 1865:—

There shall be located in the city of Baltimore, until the Board of Education shall otherwise direct, a State Normal School for the instruction and practice of teachers of public schools in the science of education, and the art of teaching and the mode of governing schools.

The sessions of the State Normal School shall be held in such suitable building as may be provided by the Mayor and City Council of Baltimore, or they declining to do so, in such building as the State Superintendent may select, the rent being charged among the incidental expenses.

The annual sum of \$8,000 is hereby appropriated for the support of the State Normal School, and beside, \$2,000 for equipment, and the cost of text-books, stationery, fuel, and other incidental expenses.

The State Superintendent shall prescribe the course of study, and make provision for model, primary and grammar schools, under permanent and highly qualified teachers, in which model schools, the Normal pupils shall have opportunity to practice the modes of instruction and discipline inculcated in the Normal School. The salaries of the teachers of the model school are to be borne in part, at least, by the tuition of the pupils of such model school.

In the Summer of 1865, Prof. M. A. Newell, at the time at the head of one of the best schools of Baltimore, was elected Principal, and before drawing up a plan for the Normal School, visited the principal institutions of this class in other States, and submitted a valuable report on the history and organization of these schools, their methods of instruction, &c., which is published in the *First Report of the State Superintendent* (Rev. L. Van Bokkelen, LL. D.,) Dec. 30, 1865.

The school was opened on the 15th of January, 1868, in a rented hall in Baltimore, the Mayor and City Council having failed to provide the suitable building contemplated by the act of 1865. There were present eleven students and one teacher. Prof. Newell, in a letter written February, 1868, remarks: "The first term opened with eleven students and closed with forty-eight; the second term commenced with forty-eight and closed with seventy-one; the third term opened with seventy, and closed with ninety-three; the fourth term opened with seventy and closed with ninety-four; and now (fifth term) there are one hundred and ten pupils in daily attendance, with four permanent teachers, and three who are employed portions of each day in giving instruction in music, drawing, and calisthenics. We have graduated fifty-six teachers, who are now teaching in the public schools of the State." In his report to the Superintendent in December, 1867, he adds:—

Two years ago this Normal School was started as an experiment. To-day it

is an accomplished fact. Without the patronage of any sect, or the encouragement of any party, it has won its way to popular favor. No similar institution in the country has achieved a similar success as permanent as it has been rapid. It remains for the Legislature to determine whether by a liberal and judicious support of the Normal School, they will provide Maryland teachers for Maryland schools; or whether they will make it necessary for young persons to go to other States for the requisite professional instruction. Normal School teaching the people will have: the only question is, Shall it be obtained within the State or outside of it? In the Spring of 1866 there were more Maryland students in the Normal Schools of Pennsylvania and New Jersey than in our own Normal School. The case is altered now; and I hope the time will never come when Maryland shall be compelled to send to other States for a supply of teachers, or to send her youth beyond her own limits for professional instruction, or (what is still more to be deprecated) to employ inexperienced and unskillful teachers.

PRESENT ORGANIZATION.

The State Normal School is open to students who may be found on examination qualified, and will sign a written pledge to teach in the public schools, from any part of the State—each county and the city of Baltimore being first entitled to seats according to the number of their representatives respectively, in the Legislature.

COURSE OF INSTRUCTION.

The subjects embraced in the more strictly professional part of the course are the History of Public Schools and Popular Education; the Philosophy of Mind, so far as it furnishes the foundation of Educational Theories; Education, as a Positive Science; Teaching, as an Art; Methods of Instruction, Classification and Government; the School Law of Maryland in its relation to Citizens, Teachers, and School Officers; the Duties and Qualifications of Public School Teachers.

The Course of Instruction is in theory strictly professional, but in practice it has been found necessary to give the term "professional" a liberal construction. It is believed, however, that before long it will be practicable, if not to dispense with academic instruction, at least to draw a well defined line between those who are studying geography, grammar, &c., and those who are studying the art and science of teaching.

The graduates are of two grades; teachers of primary schools, and teachers of grammar schools. It is proposed to add as soon as circumstances warrant, a third grade; teachers of high schools.

MODEL SCHOOL.

In September, 1866, a Model School was established in connection with the Normal School, and as an integral part of it. The Model School contains an average of seventy-five pupils, who are taught by two permanent teachers, assisted by members of the graduating class detailed from time to time for that purpose. It is made a condition of graduation that the candidate shall have taught with acceptance one term either in the Model School or some other school of the State. The expenses of the Model School are paid in part by the fees of the scholars.

INDIANA STATE NORMAL SCHOOL,

AT TERRE HAUTE.

HISTORY.

AN Act approved December 26, 1865, provides for the establishment of a State Normal School, through a Board of Trustees consisting of four members, under the following conditions:—

The Board are required to open books to receive proposals for donations of grounds and buildings, or funds for the same. They were required further to locate the school at that place which should make the largest donation, provided, (1,) that said donation should not be less in cash value than fifty thousand dollars; and provided, (2,) that said place should possess reasonable facilities for the success of the school.

The opportunity for proposals being given as required, the city of Terre Haute, in its corporate capacity, proposed a donation in currency of fifty thousand dollars, (\$50,000,) and has in good faith given her obligation for the same. Added to this, the Trustees of the Public Schools of Terre Haute donated two and three-fifths acres of ground lying within the corporate limits of the city, estimated to be worth twenty-five thousand dollars, (\$25,000.) The title to this lot has been properly transferred to the Normal School corporation. No other places made proposals, hence the location was declared to Terre Haute. As soon after the location as possible, the Board proceeded to estimate the supposed wants of the school, and to prepare a plan of building in conformity to these wants. This plan contemplates provisions for a Model Primary Training School, a Model High School, and Normal School proper.

The Model Primary Training School is a school of young pupils from the city of Terre Haute. In this school, the advanced pupils of the Normal School are to teach under the eye of the Principal, or of one of the Professors of the Normal School; and thus be *trained* in teaching, in the organization, and in the management of schools. Thus this department becomes as its name indicates, a "training school."

The High School is not intended for a training school, but simply a "model school," in which the pupils of the Normal School are to be shown model methods of teaching. By means of these methods, it is believed the Normal pupil will, in a great degree, be able to correct his erroneous theories, and confirm his correct ones.

The pupils of this school will come from the city of Terre Haute; the teachers will also be paid by the city, and be elected by the Trustees of

the city schools, subject to approval by the Normal School Board. All current expenses of this school are to be paid by the city of Terre Haute. This school is to cost the Normal School Board nothing, save the expense of providing rooms sufficient for its use.

The Normal School proper is, as is generally understood, a school in which pupils are taught, so nearly as may be, the philosophy and methods of education. Incidental to this, they will be taught the subject matter of the sciences, or branches of learning under consideration.

PLAN OF BUILDING.

Such being substantially the proposed organization of the school, a plan of building has been adopted, conforming as nearly as practicable, to such proposed organization; and in its interior arrangement it is intended to be second to no educational structure of the kind in America.

As an institution designed to educate teachers for our common schools, it is intended to be complete in its character.

One important feature of the plan is the facility which it affords the Normal School or teacher-pupil to combine acquired theory with practice. One entire story of the building is designed to accommodate the *Model* and *Training* Departments, which are in their organization separate and distinct branches of the school, and each designed to accomplish a specific purpose in the course of training to teachership.

ARRANGEMENT OF ROOMS, STYLE, ETC.

The arrangement of the first floor consists, first, of a large session room 60×70 , four recitation rooms $21 \times 22\frac{1}{2}$, and two reference libraries 13×13 , for the Model High School; second, of one room, $22\frac{1}{2} \times 30$, and another $22\frac{1}{2} \times 40$ for the Model Intermediate School; third, of one room $22\frac{1}{2} \times 30$, and one room $22\frac{1}{2} \times 40$ for the Model Primary School, each of these three classes being provided with dress rooms. The first story has, besides, a reception room 17×20 , and a teachers' dressing-room of the same size. All the rooms are entered from spacious halls ten and fifteen feet wide, and the three classes are so arranged as to have separate ingress and egress for the pupils. The Model Intermediate and Model Primary Schools are to be *training* schools. (The High School is *not* a *training* school.) The second story, entirely devoted to the Normal School proper, has a session room 60×70 , and eight recitation rooms, varying in size from $21 \times 22\frac{1}{2}$ to $22\frac{1}{2} \times 40$, grouped on either side of the session room. Two reference libraries 13×13 , and two dress rooms 11×25 , a faculty room $17\frac{1}{2} \times 20$, and a reception room $17\frac{1}{2} \times 20$, complete this story.

The third story contains two Society Halls, $22\frac{1}{2} \times 34$; one Music Hall, $22\frac{1}{2} \times 30$; a Library, $22\frac{1}{2} \times 30$; a general Museum, composed of three rooms, one of $20 \times 50\frac{1}{2}$, and the other two $22\frac{1}{2} \times 40$, and a large Lecture Room, 70×85 , which, through double doors, may be set open with the Museum rooms, and secure an arrangement for lecturing second to none in this country; two dressing-rooms and two store-rooms complete the third story.

The Normal School department, besides the rooms in the second and third stories, has a laboratory and recitation room on chemistry, and a gymnasium in the basement story.

The heating and ventilating of all the rooms in the entire building is aimed to be as complete and efficient as may be desired. Provision is made to set in operation as many as eight heating and ventilating apparatuses, which will all be located in the basement story, together with ample store-rooms for fuel, to which the coal will be distributed by small cars on rail.

The basement contains further, the lodging of a janitor, and two spacious rooms $22\frac{1}{2} \times 40$, to be provided with double sets of water-closets of the most

approved plan, together with artificial ventilation, and pure water supplied by a gas engine.

The ingress and egress of the school is such as the law indicates now in some States for public buildings in which large numbers of persons may assemble. Thus the first floor is provided with three large entries, while the basement has five, all accessible from the stories above. But the several entry doors answer at the same time for the perfect working of the several classes, and the large number of pupils the building will accommodate. Four flights of spacious stairways are in immediate proximity to these doorways, and by means of halls communicate to all parts of the building.

The height of the basement is ten feet in the clear; the first and second stories sixteen feet each, and the third story fourteen feet on the wings and twenty feet in the central part, containing the museum-room and the lecture-room.

The appearance of the Normal School will be one of substantial design, as its construction is aimed to be. The style may be called Gothic; as far as the pointed windows and doorways and the equilateral mediæval gables indicate, while other details and the outline of the roof would designate it to pertain to the epoch of Renaissance. But the whole design has its own peculiar style, and such a one as the plan or the internal arrangement called for—this plan being the correct requirement of what was considered the best arrangement for the Normal School. This was a form and an outline different from any building of the kind originated—broad, deep and high. To a front of one hundred and ninety feet there is a depth of one hundred and fifteen feet, while the several high stories give it such altitude as to tower far above any building in this city. The main entry, surmounted with a wheel window, lighting the second story hall, a triple window in the third story, and a gable in the roof present a height of ninety feet above the ground line. The flank entrances, North and South, and the East elevation, are surmounted with similar gables, but smaller in size than the main front gable; the whole displaying that unity in design that beautifies construction.

But what gives the appearance of the structure the most lively air, and which takes considerably from the ponderous form inevitably incident to the peculiar internal arrangement of the school, are two light, elegant towers in the front, built or growing with the structure to a height of one hundred and thirty-two feet, and the effect is completed by the transformation of the shafts at the corners of the building into ventilating minarets, and the oration of three crests on the roof, which form unsuspected powerful ventilating ejectors into which all the ventilating ducts discharge.

CONSTRUCTION.

Beginning with the foundation, the strength of the house is made adequate to its height and proportion.

The material is hard-burned brick, laid in cement mortar, eight feet in height from the footings. A base course to all the exterior walls, nine inches thick by two feet six inches in height, of hard limestone, protects the wall at the frost line. The cement foundation of the inside walls is generally three feet nine inches in height; and the width of the foundation at the base varies from four to five feet. A few foundation walls are less, and others more, in points bearing gables and towers.

The thinnest basement walls are nine inches, and the heaviest two feet ten inches. The exterior walls are generally two feet two inches.

The first story walls are from seventeen to twenty-one inches thick, the towers two feet two inches. The inside walls in this story are generally thirteen and seventeen inches in thickness.

The second story exterior walls are generally seventeen inches, a few parts being twenty-one inches in thickness.

The inside walls are the same in thickness as in the first story.

The third story walls vary from twelve to seventeen inches in thickness up to the wall plates.

The exterior of the building is to be faced with hard-pressed smooth brick of uniform red color, laid with flat tucked joints and Boston Bond.

The stone work is of hard limestone to the basement and first story door sills, and of Elliottsville limestone to all the other parts. The whole of substantial dimensions and bold design.

The joists of the basement and first floor are of white oak; all others of poplar.

The roof is entirely of poplar, except the main post of the large trusses over the lecture-room, which is of oak. The floors are all of oak, except the third story, which is of poplar.

The wainscoting, doors and windows are of poplar. The stairs are to be of hard wood, and the steps will be covered with perforated sheet iron.

The roof is to be slated, the cornice to be of galvanized iron, and the gutters generally of copper and improved combination.

HEATING AND VENTILATING.

The importance and difficulty of comfortably heating and properly ventilating a school building of such large proportions, has not been overlooked or neglected by the Board of Trustees.

When planning the building, natural ventilation was first considered, and as a preliminary step, a height of ceiling established of sixteen feet for the first and second stories, and fourteen and twenty for the third story, the higher ceiling, in the latter, being in the lecture-room. By reference to the plans it will be seen that the building is traversed in its whole length North and South by a hall or passage ten feet in width, in the basement, first and second stories, and partly in the third story. The front hall, vestibules and staircases are in open connection with this main passage in the several stories; the arrangement giving access to the inside of the building, of air from all sides, without its passing directly through the outside windows into the school-rooms.

The front, flank and rear doors, eight in number, admit air into the halls and staircases, regulated by dumb balanced fly-doors, and by the ventilators in the ceiling of the third story hall; this causes a removal of the air of this large reservoir from which the school-rooms draw their supply through transoms $3 \times 3\frac{1}{2}$ over all doors and pivot sash windows located eight feet from the floor, all of which is accelerated by upright air ducts ejecting their contents by the ventilating crests of the roof at one hundred feet from the ground line of the building.

To illustrate the artificial heating and ventilation in this building, it will be sufficient to take as a sample the large session room on the second floor. From two furnaces located in the basement, six hot air ducts built in the walls, with an aggregate section of six hundred and sixty square inches, and carried up to the ceiling of the second story, or a vertical height of forty feet from the heating surface, discharge, through six branches six inches in diameter each, and together through thirty-six registers eight by twelve inches, located and distributed uniformly over the ceiling, the fresh, warm air. This warm air is brought downward by means of six upright ventilating ducts, of an aggregate section of about one thousand inches, opening with six branches, each six inches in diameter, provided with registers located in the floor between joists and carried up to a height of one hundred feet from the furnaces to ejectors.

Good results are expected of this arrangement of heating and ventilating.

The contractors for brick work (Mr. Thomas Miles of Laporte and Mr. J. B. Hedden of Terre Haute,) are rapidly pushing forward the work to completion, and in the best possible style of workmanship.

As a whole, the structure will be worthy the State of Indiana, and will show how important she considers the instruction and education of her people. The estimated cost of the structure is one hundred and fifty thousand dollars. Contracts actually awarded to the amount of ninety thousand dollars, present little differences with the estimates. The building will be completed in about fifteen months.

SOUTH CAROLINA STATE NORMAL SCHOOL,

AT CHARLESTON.

THE State Normal School of South Carolina was established in connection with a Public High School for Girls in the city of Charleston, by act of the Legislature, passed Dec., 1857. The cost of the buildings and furniture was \$30,700, of which \$18,755 was paid by the State, and \$11,945 was contributed by individuals, principally of Charleston.

The school was opened, May, 1859, with fifty-one pupils, and continued in successful operation except as it was affected by the War, until August, 1864. During its continuance the school was very popular, both with the people and with teachers. For five years it received an annual appropriation of five thousand dollars from the Legislature; when this appropriation was exhausted, in 1864, the condition of the country was such that it was not renewed, and the school was suspended for lack of means of support. The whole number of students connected with this Normal School during the five years of its operations was 481. The largest number in attendance at one time was 191.

The following were the requisitions for admission :

1. Applicants must be at least fifteen years of age, of unquestionable moral character, and in sound bodily health.

2. They must sustain a good examination in the following subjects, viz.:

Orthography.—Oral and written. *Reading*.—With facility, either Prose or Poetry. *Geography*.—Geographical Definitions, with Modern Geography. *Grammar*.—Definitions and Rules of Syntax, with ability to parse plain English sentences. *Arithmetic*.—Numeration, Simple and Compound Numbers, Reduction, Common and Decimal Fractions, Simple and Compound Proportion, and Computation of Interest. *History*.—Of United States, with some knowledge of General History. A legible handwriting will be required, with some practice in English Composition.

3. They must desire to qualify themselves for teaching in this State.

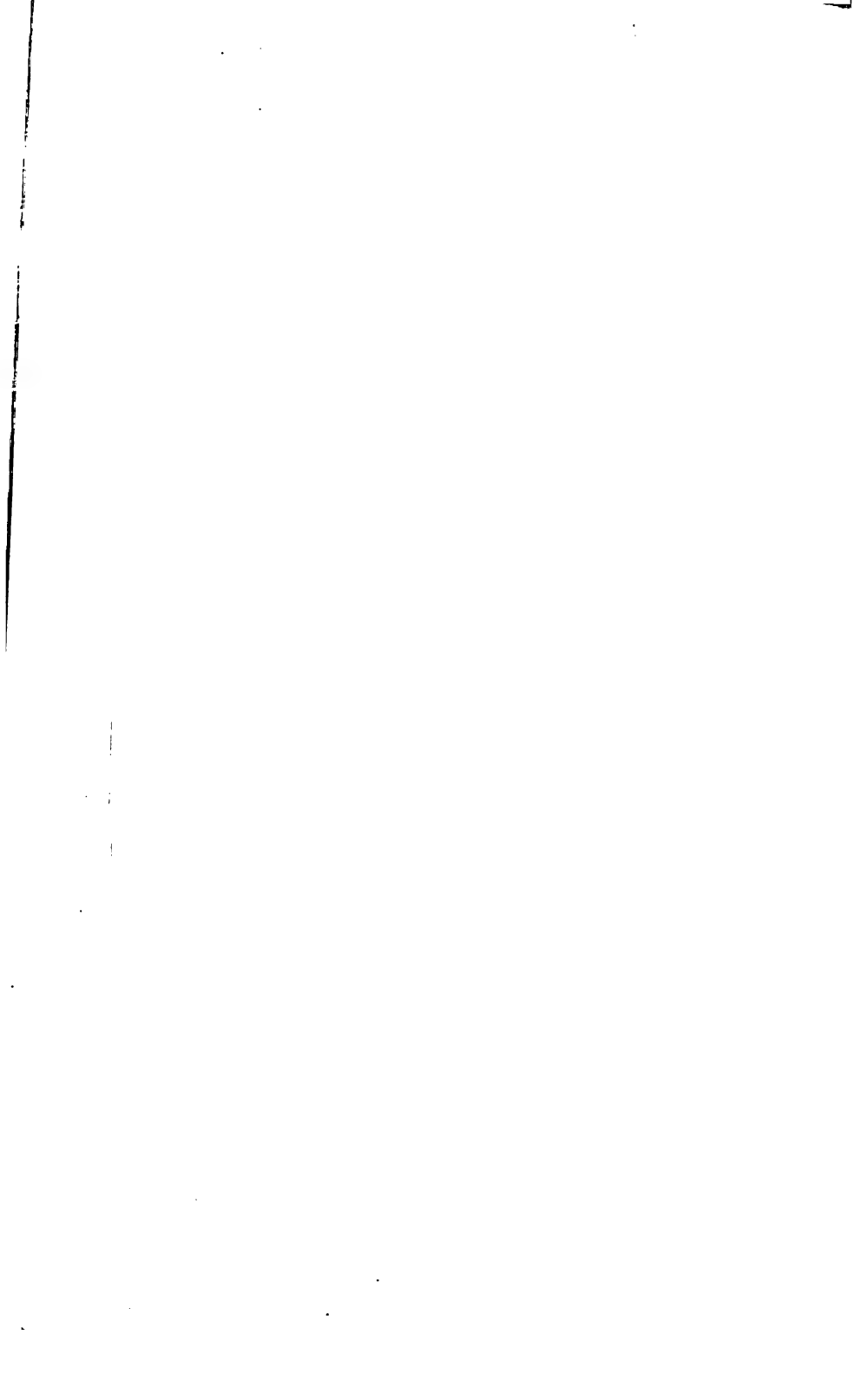
4. Each applicant shall present on the first day of the term, a certificate, signed by a majority of the delegation from the district in which she resides.

Applicants for admission to the High School Department will be excused from Provisions 3 and 4, and from examination in Simple and Compound Proportion, and Computation of Interest. In all other respects the requirements for admission to both departments are similar.

Should candidates from the different Congressional districts, out of the city of Charleston, be found incompetent to enter the Normal Department at once, they will be placed in the High School Department, provided they are qualified therefor, and comply with Provisions 3 and 4, above named.

The course extended through three years, and embraced the branches of a thorough English education, including French, Drawing, Music, the Theory and Practice of Teaching, Lectures on Education and the Details of School Management.

Measures are in progress to reopen the institution both as a High School for the city and a Normal School for the State.



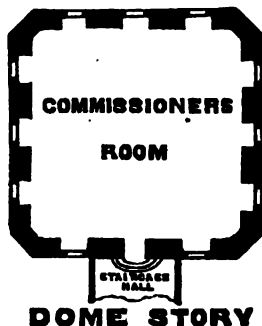
II. GIRLS' HIGH AND NORMAL SCHOOL, AT CHARLESTON, S. CAROLINA.

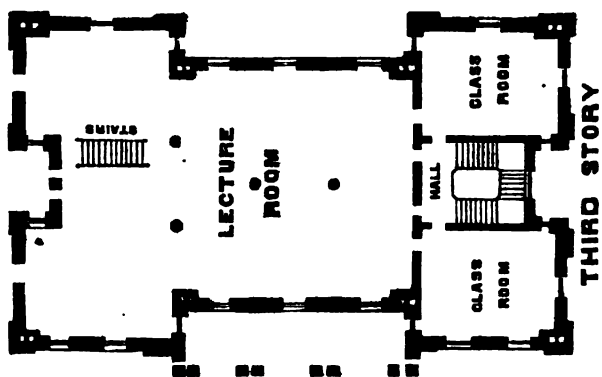
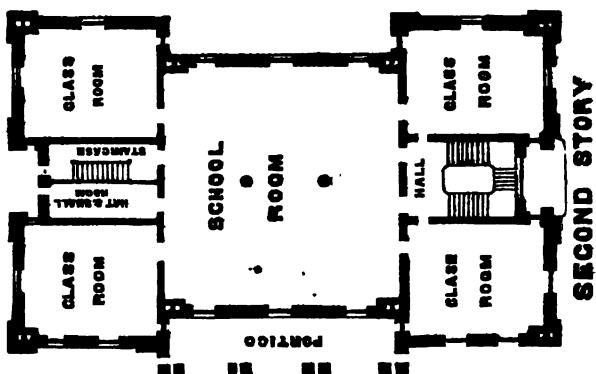
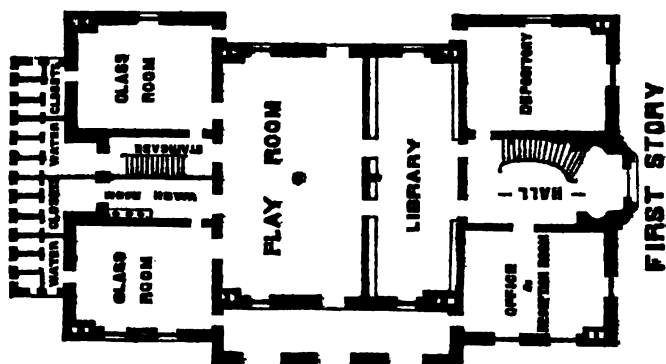
THE PUBLIC HIGH AND NORMAL SCHOOL FOR GIRLS in the City of Charleston, South Carolina, was established in 1858 and opened in the new building erected for its accommodation in 1860. The Commissioners of Free Schools, of which C. S. Memminger was chairman, thus set forth the purpose of this institution.

The purpose of this School is two-fold. First, it proposes to add to the advantages of primary instruction given by the various Public Schools of lower grade, all the advantages of higher education which are offered by the best schools for girls. From the great advantages which a large public school, with ample resources, can always command over private schools, it is safe to say that in all the elements necessary to insure success, this school must be without a rival in our community, in furnishing that education which cultivated parents desire for their daughters. Its second purpose is the education of young ladies for the profession of teachers. It is proposed to form into a special class all those whose purpose it is to devote themselves to this honorable work, and whose qualifications admit of their receiving the proper course of instruction, and to devote as much time and labor to such exercises as will be of value to them in their future duties. These exercises will be such as would be of high value to any pupils sufficiently advanced to engage in them—to those who propose to teach they are indispensable. The power of teaching well comes not by intuition; the *best* kind of education would probably give it to most men, but most of even the well-educated men and women are without it, though to no person of average ability is its acquisition impossible. It comes, however, only as other arts come; by special training, by well-directed efforts, and by patient labor. By no means a secondary purpose in importance is that of furnishing to our city and State a corps of well-educated and intelligent young ladies, who will train, in their turn, the minds and hearts of the thousands who will be committed to their charge. The School is supplied with teachers of tried ability and large reputation, in all its departments. The several congressional districts of the State have a right to send fifteen pupils each to this school, to enter the Normal department.

I. BUILDING AND FURNITURE.

The building erected for the accommodation of this school, of which we furnish illustrations, has one School Room on the second floor 40 by 40 feet, with four class-rooms, each 18 by 23 feet; and a large Lecture Room on the third floor 40 by 63 feet, with two class-rooms, each 18 by 28 feet; and a Play Room 25 by 40 feet and Library on the first floor, and a room for the Commissioners on the Dome floor.





VERMONT STATE NORMAL SCHOOLS.

THE Board of Education of Vermont in their report to the Legislature in 1866, stated that a favorable opportunity was presented to establish a Normal school, the Trustees of Randolph Academy having offered the use of their school property for a term of years for such a purpose. The Legislature accepted the proposition, and passed an act which was approved November 16th, 1866, by which the academy known as the "Orange County Grammar School," at Randolph, was constituted and established a "Normal School for the State of Vermont," for the term of five years, and the trustees of the Grammar school and their successors were constituted trustees of the Normal School.

The State Board of Education nominate the principal, arrange the courses of study, control the examinations for admission and graduation, grant certificates of qualification, and report the conditions of the school annually, to the Legislature. One section of the act also provided that the Board might consider similar proposals from other academies in the State, and establish not exceeding one Normal School in each congressional district, and arrange courses of study, conduct examinations, nominate teachers, and generally exercise the same supervision as provided in the act for the Normal School at Randolph.

The trustees of such academies as were designated State Normal Schools, were to be respectively trustees of these schools, and have the same powers and rights as the trustees of the Normal School established by this act, provided that either or all of said Normal Schools should be established and maintained without any expense to the State excepting the payment of the Board of Education for their services.

In accordance with the provisions of the Normal School act, the Board of Education have established a Normal School in each of the three congressional districts, as follows: First District, at Castleton, in Rutland county; Second District, at Randolph, in Orange county; Third District, at Johnson, in Lamville county, with two courses of study, and the following regulations.

COURSE OF STUDY.

1st, Elementary Course. Arithmetic, Geography, History and Constitution of Vermont and the United States. Interpretation of sentences, including parsing, analysis, paraphrasing, and the definition of words; Book-keeping through single entry, and Reading. Examination to be in writing in all except reading.

2d, Advanced Course. Candidates having passed a satisfactory examination in the first course, must be examined in Book-keeping by double

entry, Algebra, Physical Geography, Physiology, Botany, Natural Philosophy, Analysis of one book of Cowper or Thompson, Exposition of Milton's Paradise Lost or Bacon's Essays, and in some two of the following: Geometry, Astronomy, Chemistry, Geology, Surveying, Zoölogy, Evidences of Christianity, Rhetoric, Intellectual and Moral Philosophy.

REGULATIONS.

Classes exhibiting the qualifications required to pass an examination for admission, may be admitted at the beginning of each spring and fall term. Individuals may be admitted at any time, upon evincing qualifications corresponding to the attainments of existing classes. Examinations of such as have completed the courses of study shall be held at the close of each spring and fall term. Candidates for graduation must be examined through the entire course in which they wish to graduate.

The certificates of graduation must be signed by the president of the Board of Trustees, the principal of the school, and by the secretary and visiting member of the Board of Education.

Pupils will not be permitted to study branches in the higher course until at least six of the subjects of the first course have been completed to the satisfaction of the teachers of the school; nor then to the neglect of the subjects not so completed. No studies not laid down in the two courses of study, shall be pursued in the Normal Schools.

STATE NORMAL SCHOOL AT RANDOLPH.

This Normal School, which is the first organized under the Statute, was formally opened on the 26th day of February, 1867. The building is well situated in a quiet community; is nearly new and well adapted to the purposes for which it is now used. The former principal of the Grammar school, Mr. Edward Conant, was appointed principal of the Normal School. The number of candidates examined for admission in the spring term of 1867, was thirty-seven, of whom thirty-two were admitted. The whole number of pupils in the summer term was one hundred, and the whole number during the year, one hundred and twenty-five. Six passed the examination for graduation.

STATE NORMAL SCHOOL AT JOHNSON.

The Normal School at Johnson was opened in 1867. The building is new and spacious, having been erected with reference to the health, convenience and comfort of those who may occupy it; the apparatus is in good condition, and well adapted to the wants of the institution; and an excellent library of valuable standard works is provided. Mr. S. H. Pearl was appointed principal of this school. Forty-three students were admitted the first or spring term, six during the summer term, and twenty-four in the autumn term; whole number connected with the school the first three terms, according to the report of the principal, eighty-seven. A class of five young ladies graduated at the close of the spring term.

NEBRASKA STATE NORMAL SCHOOL

AT PERU, NEMEHA COUNTY.

HISTORICAL DEVELOPMENT

THE friends of education in this State had for some years felt the need of an institution for the training of teachers, but no feasible plan was presented till 1867, when the trustees of the Seminary at Peru, Nemaha County, offered the Seminary building to the State for Normal School purposes. The liberal offer was accepted by the State, and the Legislature, by an act passed June, 1867, established the Normal School and located it at Peru. The School is placed under the supervision of a Board of Education which consists of the Superintendent of Public Instruction, the State Treasurer, and five other persons appointed by the Governor.

The site for the Normal School includes sixty acres of land on high rolling ground, in view of the Missouri River for sixteen miles. The building is of brick, eighty feet long, forty feet wide, and three stories high. Though not completely finished and arranged for the use of the School, it was in such a state of progress as to be occupied at the commencement of the term. The estimated value of the site and the building complete is \$25,000. The Legislature at its last session appropriated three thousand dollars to aid in fitting up the building, and also twenty sections of land for an endowment fund.

Prof. J. M. McKensie was elected Principal. Two assistants were also appointed, and the School was opened Oct. 24th, 1867.

TERMS OF ADMISSION.

The Board of Education apportion two pupils from each State Senatorial District, who are permitted to attend the Normal School at half tuition, upon presenting to the Principal a certificate of their appointment by the Senator in the proper District, and conforming to the requirements of admission.

Students desiring to enter the Normal Department are required—

1st. To be, if males, not less than 17, if females, not less than 16 years of age.

2d. To give satisfactory evidence of good moral character.

3d. To sign a declaration of their intention to devote themselves to school teaching in this State, in form as follows: "I hereby declare my intention to become a teacher in the schools in this State, and agree that for three years after leaving the Normal School, I will report in writing to the Principal of said School, in June and December of each year, where I have been and how employed."

4th. To pass a satisfactory examination before the Principal, in arithmetic, through common fractions; geography, through United States and general questions; English grammar, to syntax; reading, writing and spelling.

The Institution will be open to all persons wishing to attend who will conform to the regulations adopted by the Board of Education.

Tuition in the Normal Department, \$8.00, in the Model School, \$6.00, and in the Seminary, \$8.00 per term; Latin, extra, 2.00; Music on melodeon, \$10.00; Ornamental branches at usual rates.

Room rent to those living in the building, \$4.00 per scholar per term; board, \$3.00 per week; books and stationery can be had in the village at reasonable rates.

Students are advised to bring such books as they may have used with them, for reference if nothing more, as Normal scholars will not be confined to any particular text-books.

A three years' course of study has been prepared by the Board, and any teacher completing it will receive a diploma as Normal graduate.

Pupils attending the Normal Department twenty-two weeks, will receive a certificate for teaching from the Principal, provided their advancement is satisfactory.

There are rooms in the Seminary building for accommodating thirty students. Others find board in the village of Peru.

NORMAL SCHOOLS IN OHIO.

HISTORY.

THE General Assembly of Ohio, in 1836, requested Prof. C. E. Stowe, who was then about to visit the countries of Europe, "to collect during his contemplated tour, such facts and information as he might deem useful to the State, in relation to the various systems of public instruction and education which had been adopted in the countries through which he might pass, and to make a report of the same, with such observations as he might offer, to a future General Assembly." In pursuance of these resolutions, Prof. Stowe examined the educational systems and institutions of England, Scotland, France, Prussia, and the States of Germany, and presented the results of his observations to the General Assembly in a report, in which he states as his belief that it was necessary for the success of the school system that teachers should have the means of acquiring the necessary qualifications, and that there must be institutions in which the business of teaching is made a systematic object of attention. He recommended the establishment of a Normal School or Model Teachers' Seminary, which should "be amply provided with all the means of study and instruction, and have connected with it schools of every grade for the practice of students.

In answer to a resolution of the General Assembly in 1838, the Superintendent of Schools, Samuel Lewis, presented an elaborate report upon the expediency of establishing a State University or Universities for the education of teachers or other students. He dwelt at some length on the following points: 1st, that there was not a sufficient number of teachers to supply the twelve thousand schools of the State; 2d, that a large number of teachers now employed were not well qualified; 3d, that no measures which had been adopted would supply the demand for well-qualified teachers; and 4th, that the establishment of an institution to be devoted especially to the preparation of teachers, would be the best means to remedy the evil. In evidence on this point, the Superintendent referred to the experience of different countries of Europe, and to those States in this country in which provision had already been made for the education of teachers. He considered it a settled question that there was something peculiar in the art of governing and teaching a school, which might be taught and learned as any other art or profession, and he recommended the establishment of a Normal School, with model and practice schools of different grades, so as to give the students attending, the advantage of observation and practice as well as instruction in principles.

In 1841, the Secretary of State, William Trevitt, in his report to the General Assembly, recommended the establishment of Normal Schools as a subject entitled to the serious consideration of the Legislature as well as the friends of education throughout the State. He quoted at

length from the report of the Board of Education in Massachusetts, and from the report of the Board of Commissioners of Common Schools in Connecticut, and also from the report of the Secretary of the Board, in support of the measures which he recommended.

The subject was referred to again by Samuel Galloway, Secretary, in his report for 1849, in which he quotes from Prof. Bache, Hon. Horace Mann and others, testimony in favor of institutions for the special education of teachers. Mr. Galloway recommended that a well-conducted Normal School be located at the seat of government, and said such a school would become a standard and model of education throughout the State and give dignity and influence to the profession of teaching.

Again in 1851, Henry W. King, the successor of Mr. Galloway, adducing the example of Massachusetts, Connecticut, New York and Michigan, States in which Normal Schools had been established, recommended that provision should be made for the establishment of as many Normal Schools as the school system of Ohio should demand.

From 1837 to 1855, nearly every educational convention or meeting held in the State urged, in some form, the establishment of institutes and professional schools for teachers. The subject was also earnestly discussed in the "Ohio School Journal" and by other school papers.

In 1855, the State Teachers' Association, despairing of legislative action, undertook the work of establishing a Normal School. Mr. M. McNeely of Hopedale proposed to donate buildings, provided the Association would maintain the institution. This proposition was accepted, and many teachers and others contributed generously to the endowment of the McNeely Normal School. Since 1857 it has been conducted as a private enterprise.

THE SOUTH-WESTERN NORMAL SCHOOL, at Lebanon, was opened in 1855. It has sent out a large number of teachers to supply the schools in the South-western part of the State. Besides providing for the training of teachers, it has a collegiate and business department.

THE WESTERN RESERVE NORMAL SCHOOL, at Milan, was opened in 1858.

At the annual meeting of the State Teachers' Association in 1864, Hon. Rufus King, President of the Cincinnati School Board, presented an able paper in which the wisdom and necessity of providing by law for the establishment and support of Normal Schools were strongly urged. The paper, which was in the form of a memorial to the General Assembly, was unanimously approved by the Association, and a committee appointed to secure, if possible, the necessary legislation. This paper was favorably received by the General Assembly, and a joint resolution was passed, instructing the Commissioner of Common Schools to investigate the subject, and report to the next General Assembly "the best plan of organizing one or more efficient Normal Schools in this State." In the discharge of this duty, the Commissioner, Hon. E. E. White, spent several weeks in visiting the Normal Schools of other States; and submitted to the General Assembly the following January (1866,) a special report, recommending a plan of organizing a system of Normal instruction in Ohio.

PROFESSIONAL TRAINING OF TEACHERS IN OHIO.

SPECIAL REPORT OF COMMISSIONER (HON. E. E. WHITE), FEB. 10TH, 1866.

The following joint resolution was passed March 13th, 1865:—

"Resolved by the General Assembly of the State of Ohio, That the Commissioner of Common Schools be and he hereby is authorized and requested to report to the Governor, to be by him laid before the next General Assembly, the organization and results of the best Normal Schools in this country, and so far as may be practicable, in other countries; and also the best plan of organizing one or more efficient Normal Schools in this State."

In compliance with this request of the General Assembly, I respectfully submit the following Report:

During the past summer I spent several weeks in visiting Normal Schools in other States, with a view of making myself more familiar with their organization and the practical results of their training. The following are the schools visited: New Jersey State Normal School, Connecticut State Normal School, Massachusetts State Normal Schools at Westfield and Framingham, New York State Normal School at Albany, and the Training School at Oswego. I also visited the Normal School of the city of Boston and the one at Philadelphia. I also had interviews with Mr. Richards, Principal of the Illinois State Normal University, and Mr. Wickersham, Principal of the Pennsylvania Normal School at Millersville. I had previously visited the State Normal School of Michigan, located at Ypsilanti.

In pursuing my inquiries, I also took special pains to confer with educators of large experience and observation, who are not connected with Normal Schools, either as managers or teachers. I acknowledge myself specially indebted to Hon. Henry Barnard, of Connecticut, whose familiar acquaintance with the Normal Schools of this country and Europe enabled him to put me in possession of information of great value. Through his thoughtful courtesy I had the privilege of meeting, at Boston, Rev. James Frazer, of England, who had been sent to this country by the Royal Commission on Education, to investigate our common school system. Mr. Frazer kindly favored me with a full and minute account of the Training Schools of England, and the preparation for admission to them by a system of pupil-teacher apprenticeship.*

* The following is Mr. Frazer's account of the pupil-teacher system, as given in an address before the Ohio Teachers' Association at Cincinnati:—

"A promising pupil in an Elementary School—boy or girl, as the case may be—of not less than thirteen years of age, is taken and apprenticed to the principal-teacher for a period of five years. Such scholar is employed as a monitor under the principal-teacher, and is called a *pupil* in relation to the teacher, and a *teacher* in relation to the school, thus making up the hybrid appellation 'a pupil-teacher.' At one time the Government paid this pupil-teacher, but since the 'Revised Code,' his salary has been made to devolve upon the local managers. It would begin, perhaps, at \$30 a year, and would rise at the rate of about ten dollars a year, to the end of the term. Pupil-teachers may be employed in any school, and must be employed, under pain of forfeiture, in all schools where the average attendance exceeds eighty. The school hours are generally five hours a day for five days in the week, and the principal-teacher is bound to give the pupil-teachers one hour's instruction a day out of school hours. You will at once observe that this last feature, as well as the higher rate of salary paid, and the period during which the apprenticeship continues, constitutes the characteristic of the 'pupil-teacher,' as distinguished from the 'monitor' of Bell and Lancaster. I should have added that at the close of each year of his apprenticeship, at the annual visit of the Inspector, the pupil-teacher is subjected to a progressive examination, according to a previously defined schedule of subjects, and that his salary for the past year depends upon his passing this examination.

"Well, at the end of this five years' apprenticeship, the pupil-teacher is supposed to make a

Training Schools exist in most of the Dioceses of England, and like the Elementary Schools, are in connection with some religious denomination, most of them with the Church of England. Like the Elementary Schools, they are supported by local voluntary contributions, largely supplemented by aid from the Government. The course of training is two years, the object being partly to give the students accessions of actual knowledge, and partly to familiarize them with the best methods of teaching and organizing schools.

The examination for admission, which is before a Government Inspector, lasts four days, and embraces all the subjects ordinarily taught in the Elementary Schools. At the end of each year of the training course, students have to undergo a thorough examination. If they pass the examination at the end of the second year, they are free to go out and take charge of a school, with the title of a "probationary teacher." They continue in the same school, with this title, two years, during which time they are visited twice by the Inspector. If his reports respecting their aptitude and practical skill as teachers are favorable, they then receive a graded certificate, valid for five years, subject to revision as to grade at the end of the fifth year, according to the Inspector's opinion of their progress and success as teachers.

Normal or Training Schools similar to those of England are established throughout Europe, and are regarded as an essential part of every system of public instruction. Normal Schools are also established in Nova Scotia, New Brunswick, and each of the Canadas—the one at Toronto being probably the best equipped Normal School on the continent.

In this country, Normal Schools are now established under State direction and support in sixteen States, as follows: Massachusetts has four, two opened in 1839, one in 1840, and a fourth in 1854, beside the excellent Training School sustained by the city of Boston; New York has two, one at Albany, opened in 1845, and another at Oswego, which first received State aid in 1864;* Connecticut one, opened in 1848; Michigan one, opened in 1849; Rhode Island one, opened in 1854; New Jersey one, opened in 1855; Illinois one, opened in 1857; Pennsylvania three, one first receiving State aid in 1859, another in 1861, and a third in 1862, beside the Girls' Normal School of Philadelphia; Minnesota one, opened in 1860; Iowa one, opened in 1860, (department in State University;) California one, opened in 1863; Maine two, one opened in 1864, and a second about opening; Wisconsin one, opened in 1865; Kansas one, opened in 1865; Maryland one, established by law in 1865; and Indiana one, established by an act which passed the Legislature in December, 1865. South Carolina established a Normal School before the war, but having other business than the right education of her youth to attend to, abandoned the enterprise.

It will thus be seen that of the States that have maintained for any considerable length of time a free school system, all but three have one or more Normal Schools established under State authority. The three exceptions are *New Hampshire*, *Vermont*,* and *Ohio*.†

In most, if not all of the States, the Normal Schools are supplemented by

choice, whether he will follow the profession of a teacher, or abandon it for some other more inviting career. He is considered quite free to choose, as the salary he has received has been no more than adequate to the services he has rendered. If, however, he decides to adhere to the profession of which he has been serving the apprenticeship, his natural course is to enter what you call a 'Normal,' but what we generally denominate a 'Training' School."

* Vermont established a Normal School System, Nov. 17, 1866, and had two Schools in operation in 1867, with over 200 pupils in attendance. New York established in 1866-7, Normal Schools at Fredonia, Brockport, Cortland, Potsdam, Genesee, and Buffalo—making eight in the State.

† In 1854, Cyrus McNeely, of Hopedale, Harrison county, Ohio, donated to the Ohio State Teachers' Association buildings, land and apparatus, valued at ten thousand dollars, on condition that the Association should raise an equal sum for the purpose of establishing a Normal School. The enterprise received the earnest support of the late Lorin Andrews, and several other prominent members of the Association, and was undertaken. The Normal School was opened in November, 1855, but proving too much of a financial burthen for the Association to carry, was permitted to pass into private hands. It is still in operation, and is doing a valuable service for the schools of the section of the State in which it is located.

The Southwestern Normal School at Lebanon, Ohio, was opened in 1855, under the direction of a board of trustees. Its scope is now largely widened, including a collegiate department and business institute, as well as a teachers' department. It has been attended by many hundreds of

Teachers' Institutes, supported to a greater or less extent by State aid. In New York the entire expenses of the Institutes are paid out of the State Treasury.

The plan on which most of the State Normal Schools are organized is simple. In States which have not a State Board of Education, they are established under the direction and control of a Board of Trustees, called, in some of the States, "Board of Normal Regents," who are empowered to determine the course of instruction and training, to employ teachers, etc. The current expenses, including teachers' salaries, fuel, repairs, etc., are met by State appropriations. Students pay their own board and other contingent expenses, the same as pupils do who attend any other public school. The law in Pennsylvania requires that each Normal School shall have boarding-houses capable of accommodating three hundred boarders—and board is thus furnished the pupils at a very reasonable price. In England the students at the Training Schools are expected to pay from one-fifth to one-fourth of the cost of their instruction and maintenance, the balance being defrayed from funds contributed by friends of the Training School, and by money appropriated by the Government.

The conditions of admission to the Normal Schools of this country vary in different States. In most a fair knowledge of the common branches is prescribed. In Connecticut, and I believe the same is true in New Jersey, the school authorities of the different towns select and examine candidates, and their certificate entitles the holder to a seat in the Normal School. The practical working of this plan is not satisfactory. Pupils are admitted who, from a want of scholastic attainments, are unfitted to enter upon the course of training. A want of sufficient scholarship on the part of those who seek admission to the Normal Schools is unquestionably one of the most serious defects in the American system of Normal training. In Michigan, pupils entering the Normal School have to make a pledge of intention to teach in the common schools of that State for a specified period. The same is true in some other States.

The course of instruction in most of the Normal Schools of this country is two years, with a one year's course in a few of them, for teachers of primary schools. While the one single object is to increase the teaching power of the student, the exercises have practically a four-fold aim:—

1. To impart to the student a thorough *teaching* knowledge of all the branches ordinarily taught in common schools. This includes not only a mastery of the subjects *as knowledge*, which is the first requisite for successful teaching, but also a mastery of them *as subjects to be taught to others*. This is the one distinctive idea which runs through every lesson and exercise.

2. To impart to the prospective teacher a practical knowledge of the *guiding principles* of his art, and to enable him to reduce such principles to something like a philosophical system. In other words, the second aim is to teach the *science* of education. This is usually sought to be accomplished by lectures.

3. To impart to the teacher a knowledge of the best methods of instruction and government, including the methods specially applicable to each stage of the child's progress and to each branch of knowledge. This part of the course is sometimes united with the first, each recitation being conducted with a view of unfolding the true method of teaching the topic. But in all Normal Schools where instruction in methods of teaching is made duly prominent, separate exercises are also devoted to the subject.

4. To impart to the student *skill* in the art of teaching by an application of his knowledge of principles and methods in *actual practice*. For this purpose most Normal Schools have a Model or Experimental Department, in which the students practice under the supervision and criticism of a skillful teacher. In the best Training Schools these model-lessons, as they are called, are made the basis of instruction in methods. In some Normal Schools the practice of the students is obtained by giving model-lessons to their own classes.

teachers, and has unquestionably exerted a potent influence upon the character of the schools in that section of the State. It is now in successful operation.

The Western Reserve Normal School at Milan, Ohio, was opened in 1858, but my acquaintance with the institution is too limited to permit me to speak of its professional character or influence. It is believed to be doing a good service for the schools of its locality.

The number of teachers that have attended these different institutions, which are, of necessity, largely academic in their character, is evidence of an encouraging demand for professional training, and the good accomplished by them in their respective localities, is an assurance that the influence of a State Normal School of a high professional character would be wide and potent.

In the different Normal Schools visited, I observed a very great difference in the relative attention given to these four parts or aims of the course of training; in the majority of them, however, the first received the chief attention. In the Training Schools at Oswego and Boston, the last three made up the course—an adequate knowledge of the branches to be taught being required as a condition of admission. In the reorganization of the Oswego Training School on a wider basis, it is proposed to provide for a thorough review of the different branches as a *preparation* for the regular course of professional training.

I am strongly tempted to enter more fully into details, but as a general outline of the plan of organization and course of instruction of Normal Schools will best serve the purposes of this report, I pass to the second inquiry of the General Assembly.

RESULTS OF NORMAL SCHOOL TRAINING.

What are the practical results of Normal School training in Europe and in this country? Does the success of the Normal Schools that have been established afford substantial and conclusive proof of their value as practical agencies for the preparation of teachers? The only difficulty in answering these inquiries arises from the abundance and high character of the testimony at hand. The experiment of specially training persons for the teacher's office has been tried on a scale so wide, under such a diversity of condition, and with such a uniformity of results, that the evidence of its success is not only manifold but superabundant for citation as testimony.

The first school in Europe for the preparation of teachers was founded by the good Franké, at Halle, in Prussia, about the year 1704. The success of the experiment may be inferred from the well authenticated fact that the teachers from this school, spreading over Northern Germany, prepared the way for the great revolution in public instruction which was accomplished during the reign of Frederick William III. Since Franké's successful experiment, Normal or Training Schools for teachers have multiplied in Europe until they have become an essential part of every system of public instruction. The Training Schools connected with the Elementary Schools of Great Britain are regarded as one of the two "corner-stones" upon which the system rests. The larger the experience and the wider the observation of English educators, the more emphatic is their testimony upon this subject.

Hon. Edgerton Ryerson, Chief Superintendent of Public Instruction of Upper Canada, says:

"Wherever Normal Schools have been established, it has been found that the demand for regularly trained teachers has exceeded the supply which the Normal Schools have been able to provide. This is so in the United States and France; it is most painfully and pressingly so in England, Ireland and Scotland. I was told by the Head Masters of the Great Normal Schools in London, in Dublin, in Glasgow and Edinburgh, that such was the demand for pupils of the Normal Schools as teachers, that in many instances they found it impossible to retain them in the Normal Schools during the prescribed course, even when it was limited to a year."

The first Normal School in this country was opened in July, 1839, at Lexington, Massachusetts,—now removed to Framingham. During the same year a second Normal School was opened at Barre, now at Westfield, and during the next year a third at Bridgewater. The success of these pioneer American Normal Schools is sufficiently attested by the fact that they are still cherished by the State as the only unfailing reliance for supplying the schools with well-qualified teachers.

Horace Mann, than whom no man was a more competent witness, pronounced even the earlier success of the Normal Schools of Massachusetts a "practical demonstration" of their high value as agencies for supplying the common schools with competent teachers, and emphatically declared them "the one indispensable thing for carrying forward a system of common schools." In his eleventh annual report as Secretary of the State Board of Education, he says:

"These institutions [Normal Schools] are steadily fulfilling their great mission. They are gradually revolutionizing the methods and processes of instruction, improving its quality and enlarging its quantity throughout the State."

The highest authorities in the State, among whom are Josiah Quincy, Edward Everett, George S. Boutwell, Mark Hopkins, Barnard Sears, George B. Emerson, Joseph White, Birdsey G. Northrup, John D. Philbrick, and Governor Andrew, all concur in the opinion that they have been eminently successful and useful in preparing for the schools a superior class of teachers.

Mr. Northrup, who for nine years has been the Traveling Agent of the State Board, and who has probably seen more Normal teachers at work in the school-room than any other man in America, says:

"The more I visit schools and observe their methods and results, the stronger is my conviction of the necessity and usefulness of Normal Schools. My observations in schools and among the people assure me that our Normal Schools have widely diffused better ideas of education and awakened increased popular interest in the cause of public instruction.

"They have greatly elevated the standard of qualification for teaching, both among teachers and in the popular estimate. The Normal graduates, as a general fact, have shown greater thoroughness and skill in teaching, more system in arrangement of studies and in the programme of daily duties, more enthusiasm in their work and devotion to the profession."

But the most satisfactory evidence of the superior qualifications and success of the Normal teachers of Massachusetts as a class was called out in 1859 by an ignorant and ridiculously abortive attack upon the Normal Schools. Ex-Governor Boutwell, who was then Secretary of the Board of Education, sent circulars to all the towns [townships] in the State, soliciting from the school committees [boards of education] a full and free expression of their views as to the success or failure of Normal graduates as teachers. All but eleven of the replies received were favorable to Normal Schools. The testimony is found in the twenty-second annual report of the Board of Education. Such an indorsement of the superior success of professionally trained teachers, after twenty years' trial, by the school authorities of an *entire* State, is certainly evidence not to be gainsayed or resisted.

Equally conclusive is the testimony respecting the skill and success of the graduates of the State Normal School of Connecticut. In 1862, inconsiderate and wild charges were made against the Normal School in the General Assembly (not wilder, however, than Assemblymen had sometimes made against the entire common school system,) and the Joint Standing Committee on Education was instructed to inquire into its affairs and management. At the May session, in 1863, this committee submitted a carefully prepared report, in which they give the following emphatic testimony:—

"Testimony has been received from members of Boards of Education, District Committees, Principals of large Public Schools, and others interested in educational pursuits, from every county in the State—testimony which is confirmed by a careful investigation of all seeming opposition—that, as a class, the graduates and under-graduates of our State Normal School are more sought for as teachers, pass better examinations, are stricter disciplinarians, are more thorough and systematic in teaching, waste less time in educational experiments, are more ready to improve by suggestions, have more laudable pride in their profession, show larger results, and give to school committees, parents and guardians better satisfaction than teachers from other sources."

Of the large number of statements received from the school visitors in the towns [townships] of the State, only *one* was unfavorable to the Normal teachers.

The Board of Trustees of the State Normal School of Rhode Island, in a late report to the General Assembly, say:—

"The almost uniform testimony is in favor of the marked superiority of teachers from Normal Schools. The sentiments of the people in the localities where they have taught, ranges from the simple expression of 'favorable,' to the strongest and most enthusiastic terms of satisfaction. It is not pretended that Normal graduates never make failures. Some of those who have left Cambridge, Andover, West Point and Annapolis, have failed. Yet nobody doubts but the majority of those who have attended these institutions have become better lawyers, divines, soldiers and sailors than they would have been without the advantages offered there."

The above testimony is fully corroborated by all the information I have been able to collect upon the subject. No one who candidly considers testimony like this—and it might be increased to almost any extent, and made to include every State and country that has made the experiment—can resist the conclusion that the special professional training of teachers in Normal Schools is eminently advantageous and fruitful, largely increasing their success and usefulness. And this overwhelming evidence, be it remembered, is the result of very imperfect methods of professional training and instruction, since our Normal Schools are, as yet, by no means a full realization of what is desirable and practicable in this direction.

NECESSITY OF SPECIAL AGENCIES FOR THE TRAINING OF TEACHERS.

This leads me to a fundamental fact in the successful administration of a system of public instruction—one that lies back of and beneath all the inquiries that have been considered. The one *vital* condition of a good school is a *good teacher*. Other conditions are important; this is essential. School houses and apparatus, text-books and courses of study, classification and supervision, are indeed valuable agencies and conditions, but they are all inadequate until vitalized by the informing spirit of the teacher. Hence in a system of education the advancement of the teacher is increasing success; his want of progress, failure.

The distinguished M. Guizot, then Minister of Public Instruction in France, once said: "All the provisions hitherto described would be of no effect if we took no pains to secure for the public school an *able master*." Victor Cousin, another able Minister of Public Instruction in France, is still more emphatic: "The best plans of instruction can not be executed except by the instrumentality of *good teachers*, and the State has done *nothing* for popular education, if it does not watch that those who devote themselves to teaching be well prepared. I attach the greatest importance to Normal Schools, and I consider that all future success in the education of the people depends upon them." Dr. Channing, in 1837, said: "The most crying want of this Commonwealth [Massachusetts] is that of accomplished teachers. We boast of our schools, but our schools do comparatively little, for want of educated instructors. *Without good teachers, a school is but a name*." Said Horace Mann, in alluding to the means for improving common schools: "But the great object for carrying the benign work of reform to our schools *must be the teacher himself*. No fullness in the qualifications of others can be the supplement of any material deficiency in him."

Testimony like this might be multiplied until the name of every educator who has written upon the subject is cited. Indeed, the propositions we have stated, if not self-evident, are the plain deductions of universal experience, and, as such, need no other proof. They are accepted educational axioms.

But in order that a system of common schools may be supplied with competent, efficient teachers, such teachers must be raised up and fitted for their office by special preparatory training. The emphatic testimony of educators on this point has become "like the voice of many waters." Everywhere, those whose experience and observation make them competent to decide such a question, agree that the high vocation of the teacher demands special and thorough preparation.

But, independent of all testimony of this kind, it stands to reason that he who would undertake the awakening, guiding and enlightening of the human soul, should bring to so great a task special preparatory training. In every pursuit of life, demanding any considerable degree of skill and knowledge, the universal sense of mankind demands special preliminary preparation. The artisan has his years of apprenticeship, and the legal, medical, and other professions, their schools of special training and practice. The young attorney whose only credentials are natural aptitude and a college diploma, finds himself briefless; and the quack who, without special training, has the audacity to enter the sick chamber and lay his unpracticed hands upon the human vitals, is (or ought to be) denounced as a criminal. The building of forts and monitors is not intrusted to house carpenters, and a mastery of the architectural art is the

talisman that transmutes ledges of rocks into temples of strength and beauty. Who then shall attempt to build up this immortal temple of the soul without special preparation for so great and difficult a work?

A second argument in favor of professional training for the teacher, is based upon the complex nature of the work he has to perform. If our whole theory of education is not a delusion, it is the science of sciences. As an art it has no equal, either in susceptibility of improvement or the knowledge and skill required for its successful prosecution. Every step of the teacher's work demands a knowledge of the faculties of the human mind, the order of their development, and the kind of knowledge and training required at each successive stage of such unfolding. True education is, in a word, based upon principles that go to the very core of mental and moral science, and sweep over all human knowledge and progress. Who, in view of such facts as these, will pretend that a clear and definite knowledge of the principles that underlie the work of education is not an important preparation for the teacher's high vocation? Who will claim that an examination of tuitional methods, in the light of these principles, would not greatly assist the young teacher in determining and regulating his own methods?

A third argument is the nature of the material upon which the teacher has to work. "A workman," says Mann, "should understand two things in regard to the subject matter of his work; first, its natural properties, qualities and powers; and secondly, the means of modifying and regulating them with a view to improvement." But what material workman ever yet touched, with hammer or chisel, such materials as those the teacher has to fashion into forms of power and beauty? What laws so hidden, and at the same time so essential for guidance, as those which must direct his every stroke? How often, through ignorance of the nature of the human mind, its susceptibilities and laws of growth, are a teacher's most zealous efforts wasted—that which promised to be the rich fruit of knowledge and virtue turning to ashes in his unskillful and misdirected hands!

Finally, the infinite value of the material placed in the teacher's hands renders a practical knowledge of its nature and qualities of the highest importance. The block of marble, spoiled by an unskillful blow, may be replaced; but the soul, marred and destroyed by ignorant handling, has no substitute. The gold and diamonds of earth can not replace it. Every line of deformity, every trace of the misguided chisel, is made upon it for eternity. Like the broken flower or the consumed diamond, the soul's purity and glory, when once lost, can never, save by Divine grace, be restored. Surely those who may be called to the teacher's office should bring to such a high responsibility special and thorough preparation.

It is not, of course, claimed that we can have no successful teachers without the agency of professional training. Here and there we find teachers of great natural aptitude for their work, achieving the highest success without such training. Nor is it claimed that any course of preparation can make an eminently successful teacher out of one who is seriously wanting in native teaching ability. A degree of natural aptitude is essential to the highest success of the teacher, whatever may be the advantages of training and experience; but this is equally true, as Edward Everett has remarked, in every pursuit or calling—in law, physic and divinity, in trade, manufactures and farming, and in the military art—and is never thought to militate against either the necessity or value of special preparation; since it is the function of all training, general or special, to develop and equip native powers—not to create them.

NECESSITY OF SPECIAL AGENCIES FOR THE PROFESSIONAL TRAINING OF TEACHERS IN OHIO.

In the light of the foregoing truths and experiences, it is evident that the most vital question involved in the improvement of the schools in Ohio is this: How can these schools be supplied with competent, efficient teachers? That they are not thus supplied is painfully evident. No one can question the assertion that there exists in them a wide-spread and lamentable lack of well-qualified teachers. The annual returns of the different boards of examiners

show that only about one half of the teachers certificated by them possess sufficient scholarship to secure a creditable grade of certificate—to say nothing of their lack of professional knowledge, skill and experience. It is scarcely necessary to add that this is the result of a sufficiently low standard of measurement. It is true, there are found in our schools many excellent teachers—not a few who are an honor to their calling and a blessing to the cause of education; but the general fact is lamentably true, that the great body of the teachers of the State possess exceedingly limited qualifications.

Now it is manifest that whatever else we may do, so long as this state of things exists, we shall fail to “secure a thorough and efficient system of common schools throughout the State,” as is enjoined by our State Constitution. It is true that the task of supplying our schools with competent teachers is a difficult one, but we must succeed in it, or we shall surely fail to accomplish what we have undertaken in the direction of universal education. And let it be remembered, for our encouragement, that just to the extent we do succeed in this task, to that extent shall we also be successful in increasing the efficiency of our school system.

Our experience, thus far, is conclusive that we can not depend upon ordinary school agencies to raise up a supply of qualified teachers for our schools. The general improvement of the schools of the State through the introduction of the principles of classification and gradation, the establishment of high schools, etc., has unquestionably reacted upon teachers, greatly increasing their qualifications and efficiency; but all experience shows that these agencies are entirely inadequate, even in those localities in which they have been carried to their highest perfection.

Nor can we longer fold our arms and depend upon the philosophy of Dogberry to vitalize and improve our school system. Nature has an exceedingly limited supply of self-furnishing and self-guiding teaching ability; or she is very chary of it. It is sadly evident that the great majority of teachers do not come from her hands fully endowed and panoplied for their work, as Minerva is fabled to have sprung from the brain of Jupiter. The truth is, neither natural aptitude, nor experience in teaching, nor good school instruction, nor good examples of teaching, can be depended upon to provide a sufficiency of competent teachers for our schools. The first two of these agencies are fixed quantities, so far as our efforts can effect them, and the last two must be increased and widened mainly by a corresponding increase of well qualified teachers, which is not unlike the fruitless endeavor to intensify a cause by first increasing its effects!

I have thus shown the absolute necessity of well-qualified teachers in an efficient system of education; the wide spread and lamentable lack of such teachers in the schools of this State; the inability of ordinary school agencies to supply these schools with competent teachers; and the necessity and practicability of special professional training as a preparation for the teacher's office. I am carried by the force of an irresistible logic, and by the plain teachings of experience, one step farther. The State of Ohio must provide special agencies for the training of competent teachers for the schools under its control. This is the practical conclusion of the whole matter. The State, in assuming the responsibility of maintaining a system of common schools for the right education of its citizens, has also taken upon itself the consequent duty of providing these schools with capable, efficient teachers—a duty which can not be ignored, and which ought not to be longer neglected. “An adequate knowledge of the theory and practice of teaching” is now made by law an essential qualification of every common school teacher, and it is the imperative duty of the State to provide facilities for acquiring such important knowledge.

In the firm belief that the establishment of an efficient system of professional instruction and training for the teachers of the State is an essential measure for the adequate improvement and elevation of our school system, I take pleasure in commending the following plan of organizing such a system to the favorable consideration of the General Assembly:

PLAN FOR PROVIDING NORMAL INSTRUCTION IN OHIO.

A system of professional training for the teachers of this State, to be in the highest degree efficient and successful, must place such training within reach of every teacher. It must also provide facilities of a high character for the training of a superior class of teachers, whose example and influence shall vitalize the profession and lift it up to a higher standard. Without entering upon a discussion of these propositions, I will proceed to describe three agencies which, taken together, present such a system. They are: 1. County Teachers' Institutes. 2. District (Judicial) Normal Institutes. 3. State Normal School.

1. *County Teachers' Institutes.*—A well conducted Teachers' Institute, bearing directly and practically upon the duties of the school-room, is an important instrumentality for the professional instruction of teachers. Its value has been tested by more than twenty years' trial in every State blessed with a free school system.

I think I am safe in saying that no other agency has done more toward increasing the professional attainments of the great body of American teachers than this. In the State of New York, where it first originated, an Institute continuing in session two weeks, is held annually in every county. The example of other States might also be cited.

The amendatory school law of 1864 requires each applicant for a teacher's certificate to pay a fee of fifty cents as a condition of examination, and sets apart most (at least two-thirds) of the funds arising from such fees for the support of Teachers' Institutes in the several counties. In the larger counties this fund is sufficient to hold a good Institute each year, but in the smaller counties it is not adequate to meet all expenses. The new system is not yet in full operation, but it promises much for the future.

The great difficulty now to be overcome is the lack of experienced and competent institute superintendents and instructors. Very few teachers are capable of performing this important service, and those who are capable have, as a general rule, other duties which require their entire time. In several counties, arrangements for holding Institutes have had to be abandoned because the committee could secure no competent person to take charge of them. Nine pressing invitations for assistance were on my table at the same time, only three of which could possibly be responded to favorably.

What is needed is a corps of experienced Institute instructors, capable of unfolding and illustrating by practical drills and lessons, the best methods of teaching the several branches of study to classes of different and varying capacities, and able to present clearly and systematically the principles which underlie such methods, as well as those which must guide the teacher in the higher duties of moral training and government. Such a corps of instructors going through the State, organizing and conducting Institutes in the more backward counties, and lending a helping hand wherever their assistance may be needed, would make the new Institute system a powerful agency for the better preparation of teachers, and, as a consequence, for the advancement of the school system.

But in order that such a corps of instructors may be put into the field, an appropriation by the State to assist in their support, is absolutely necessary. I would most earnestly repeat the recommendation made last year, that an appropriation sufficiently large to keep at least three competent instructors in the field be made by the General Assembly. The teachers of the State are paying annually over \$8,000 for the support of Institutes. Could the State pay at least half this sum, the present Teachers' Institute fund would be made fruitful as a practical means for the better qualification of teachers.

2. *District Normal Institutes.*—County Teachers' Institutes have, of necessity, too brief sessions to afford such a systematic course of professional training as all our teachers need, and as many of them are willing to receive. Even when they are continued two weeks, there is little time for model-lessons and practical drills to illustrate methods of teaching. In other words, there is little time for professional TRAINING, the brief session of the Institute being required for INSTRUCTION in the methods and principles of the art of teaching.

To meet this growing demand for a more thorough course of instruction and training than the County Institute can furnish, temporary Normal Institutes, continuing in session from four to six weeks, have been organized. So successful have been these Normal Institutes, that they have been organized in connection with several of the Normal Schools of the country.* Eight such Institutes were held in the State during the past summer; most of them, however, partook more of the character of brief schools for the review of the common branches, than of Institutes for the professional training of teachers. What is needed is a thorough and efficient system of Normal Institutes, largely professional in their character.

The plan I would respectfully recommend is the organization of one such Normal Institute in each of the ten judicial districts of the State, a session to be held annually, at some convenient point. There will be little or no difficulty experienced in securing the use of suitable buildings and other accommodations without expense to the State. These will be gratuitously furnished by Boards of Education and the proprietors of private institutions of learning, for the purpose of securing the advantages of the Institute to their respective localities. The expense of instruction should be borne by the State, and this will require an appropriation of about \$400 to each Normal Institute held, making an annual aggregate of about \$4000. I know of no way in which so small an expenditure for the elevation and increased efficiency of the school system can be made with certain promise of so large a return. These Normal Institutes, held in different localities, would exert an influence which would soon permeate the entire school system.

3. *State Normal School*.—To complete the system of professional training recommended, there should be established at least one State Normal School of a high character. No system of Institutes, however complete and thorough, can alone accomplish what is needed. The length of their sessions is, at best, too limited, and the course of training too partial to raise up such a class of model teachers as are needed to lift common school instruction out of the deep ruts of routine, and to impart to it vitality and power. We need teachers trained by superior methods, that they in turn may become the teachers of teachers, and both by example and precept lift up the profession to a higher and truer standard. In short, we need a Normal School that shall be able to go beyond mere scholastic training and model examples of skillful teaching; that shall unfold thoroughly and systematically the *why* as well as the *how* of education—that shall teach its history, its philosophy, its methods.

It is true that one Normal School, however complete and thorough, will not be adequate for the accomplishment of a title of what is needed. But we must make a beginning, and, as all experience teaches, one thoroughly equipped Normal School will prove more efficient and valuable, even for the State at large, than two inadequately furnished for their mission, and consequently feeble and superficial in their influence and training. Besides, the complete success of one Normal School will soon prepare the way for the organization of another.

The cost of establishing a first-class Normal School in this State will depend,

* The first Normal Institute of this character ever held in this country was convened at Hartford, Connecticut, in 1839, by Henry Barnard, then Secretary of the Board of Commissioners of Common Schools for that State, at his own expense, "to show the practicability of making some provision for the better qualification of Common School teachers." It was called a "Teachers' or Normal Class," and was so successful that Mr. Barnard, in giving an account of it in the Connecticut Common School Journal for November, 1839, used the following language:—

"We have no hesitation in saying that a judicious application of one-fifth of the sum appropriated unanimously by the House of Representatives to promote the education of teachers of Common Schools in different sections of the State, would have accomplished more for the usefulness of the coming winter schools, and the ultimate prosperity of the school system, than the expenditure of half the avails of the School Fund in the present way. One thousand, at least, of the eighteen hundred teachers would have enjoyed an opportunity of critically revising the studies which they will be called upon to teach, with a full explanation of all the principles involved, and with reference to the connection which one branch of knowledge bears to another, and also to the best methods of communicating each, and the adaptation of different methods to different minds. They would have become familiar with the views and methods of experienced teachers, as they are carried out in the better conducted schools than those with which they had been familiar. They would have entered upon their schools with a rich fund of practical knowledge gathered from observation, conversation and lectures, and with many of their own defective, erroneous, and perhaps mischievous, views corrected and improved."

In the fall of 1839, and the spring of 1840, Mr. Barnard held County Institutes identically the same as those held in New York in 1842.—*Ed.*

of course, upon the cost of the grounds and buildings. The experience of several other States leads me to hope that these will be given by some community as a *bonus* to secure the location of the institution. The citizens of McLean county, Illinois, subscribed one hundred and forty-three thousand dollars for the sake of getting the Normal University of that State located in the county. Hon. Josiah Quincy, Boston, purchased a building and presented it to the Normal School at West Newton, Mass., now removed to Framingham. The city of Oswego has purchased and fitted up a fine building for the State Training School of New York. Other similar instances might be named.

The annual expense of maintaining a Normal School of a high character, when once established, will be about \$12,000. The current expenses of the Illinois Normal University, Michigan State Normal School, New Jersey State Normal School, and the New York State Normal School at Albany, are respectively about \$12,000 a year. This sum will be needed in this State.

It will thus be seen that the actual cost to the State of maintaining the entire system of Normal and Institute instruction which I have recommended, is only about \$20,000—a sum altogether insignificant when compared with the grand object it is to promote. The law making the appropriation may with propriety be entitled "An act appropriating \$20,000 to keep the half of \$3,000,000 from being squandered on incompetent teachers!"

Any attempt to present a complete course of study and training for the proposed Normal School, or to give the details of its organization, would carry me beyond the proper limits of this report. I would recommend that the organization and management of the entire Normal System, including the Normal School, the Normal Institutes, and the County Institutes, be intrusted to a Board of Trustees, or Regents, to consist of the Governor and Commissioner of Common Schools, as *ex officio* members, and three other persons to be appointed by the Governor, and confirmed by the Senate, the same to be known as the "State Board of Normal Regents," with full authority to appoint a general Institute superintendent, to act in conjunction with the Commissioner of Common Schools, and to employ Institute instructors—the amount expended each year being limited to the State appropriation for the purpose. In those counties which may have efficient local Institute associations, the management of the County Institutes should be left, as now, to such associations, the State instructors rendering needed assistance. But I forbear entering further into details. Should the plan recommended receive the approbation of the General Assembly, I shall be happy to render any assistance in my power in determining the practical details of the system.

It is now nearly thirty years since Hon. Samuel Lewis, then State Superintendent of Common Schools, submitted to the General Assembly of Ohio, in answer to a resolution, a "Report on State Institutions for the Training of Teachers and Others," in which he recommended the establishment of a State institution for the professional training of teachers, sustaining his recommendation by a cogency of argument worthy of the great cause he sought to promote.

Since the date of Mr. Lewis' report, which presented to Ohio the enviable opportunity of becoming the American pioneer in the professional training of teachers, Normal Schools have been established by sixteen States—Ohio being outstripped by States that have not a tithe of her wealth or population. Even new-born Maryland has made the Normal School an essential element of her new free-school system. Indeed, States that have been peopled since the General Assembly of Ohio passed the resolution referred to, have now their Normal Schools. Massachusetts is paying more than \$22,000 annually for the support of her Normal Schools and Institutes. New York pays annually from \$20,000 to \$25,000* for her Normal Schools, about \$17,000 for Teachers' classes in Academies, and from \$10,000 to \$15,000 for Institutes. Illinois, even while the late civil war was raging, appropriated, in two installments, \$97,000 to pay, in part, for the magnificent building now occupied by her Normal University.

Why, in a matter so fundamental and vital as the supplying of her schools with qualified teachers, should Ohio longer fail to be the peer of her sister States? An efficient system of professional training for the teachers of the State is imperatively needed to infuse new life and vigor into the schools and elevate the standard of public instruction. I would most earnestly commend this subject to the favorable consideration of the General Assembly.

* Increased to \$60,000 in 1867.

WEST VIRGINIA NORMAL SCHOOLS.

THE Legislature of West Virginia, by an act passed February 27, 1867, established a Board of Regents of the State Normal School of West Virginia, to consist of the Superintendent of Free Schools, *ex-officio*, the Secretary of State, Auditor, and Treasurer, and one member appointed by the Governor from each of the three congressional districts in the State. The first meeting of the Board was held at Guyandotta, September 6th, 1867, at which time the property formerly known as Marshall College, and valued at \$10,000, was transferred to their custody for the use and benefit of a Normal school.

Provision was made for additions and repairs to the buildings and premises, and ten acres of land purchased, making the whole amount for the use of the school eleven and a quarter acres.

The building is four stories high, fifty feet by thirty-six, with a two-story brick wing, fifty feet by thirty, and is pleasantly situated on the banks of the Ohio river, about two miles from the town of Guyandotta. An appropriation of \$2,500 was made to procure furniture and apparatus for the school.

An additional appropriation of \$85,000 has been made this year, (1868,) and the school is to open June 1st.

The Academy at West Liberty, with about four acres of land, has been purchased by the superintendent for a second Normal school, and the title vested in the Board of Regents.

A preliminary session of this school was opened at Fairmont on the 6th of May, and continued until the 4th of October, or five months. There were about ninety students in all, thirty-three of whom were in the Normal Department; nearly all of these engaged in teaching after the close of the school. Prof. John N. Boyd was Principal, and Prof. A. S. Cameron had charge of the Model Training School.

At a meeting of the Board held October 18th, 1867, the following branches were ordered to be taught in the Normal schools, viz: Orthography, Reading, Penmanship, Arithmetic, Grammar, Geography, Book-keeping, Algebra, Geometry, Trigonometry, with practical Surveying, Botany, Natural Philosophy, Anatomy, Physiology, Music, and the Art of Teaching, and such other branches as the Board may from time to time direct.

DELAWARE STATE NORMAL UNIVERSITY.

THE Delaware State Normal University was organized, November 19th, 1866, and incorporated, January 23d, 1867:

The necessity of a Seminary, or some institution "wherein students might receive a professional education which should peculiarly qualify them for instructing and disciplining youth, had attracted the attention of prominent friends of education in the State of Delaware before 1866. It was believed that the establishment of a Normal School would be the most efficient means for elevating the standard and increasing the usefulness of Common Schools.

As the school was to be commenced without any aid from the State, and to be dependent upon the voluntary patronage of the people, a subscription of more than twenty scholarships was secured before the school was opened. Besides the Normal School course, the institution provides for a business education in its Business Department, and has also a department in which teachers are prepared to take the charge of academies and high-schools, where the classics, modern languages and higher mathematics are taught.

In the report and catalogue of the school, there are given the names of the Board of Trustees, consisting of twenty-eight gentlemen representing different positions and avocations in life, a visiting committee of nine, and a faculty of five gentlemen employed as professors or instructors, and one lady, a teacher of music.

For admission to the Normal course, the candidate must be at least fourteen years of age, of good health and moral character, and be able to pass an examination in reading, spelling, penmanship, arithmetic, grammar and geography.

The course of study requires three years, and includes, besides the usual High School or academic branches, the following subjects:

School Government, Principles of Education, Theory and Practice of Teaching, School Economy, Mercantile Calculations, Commercial Rules, Double Entry and other forms of Book-keeping, Business Correspondence, Extemporaneous Speaking, and Conversational Lectures upon the methods in teaching each of the branches pursued.

The average annual expenses are for tuition, \$54; text-books, \$7.25; board, thirty-seven weeks, \$188.75. Total, \$200. For male students, from \$200 to \$240 for the year.

LOUISIANA STATE NORMAL SCHOOL.

HISTORICAL SKETCH.

THE STATE NORMAL SCHOOL of Louisiana was established by an act of the Legislature passed in 1858, and modified by subsequent enactments of 1859 and 1860. It was located in New Orleans, and organized in connection with the public schools of that city. Its first session opened in 1858, and the school was continued in successful operation till April, 1862.

The Legislature in 1860 appropriated ten thousand dollars to aid in the erection of a suitable building; a similar appropriation was made the same year and for the same purpose by the common council of the city. Of these sums ten thousand dollars was received, five thousand dollars from the State and the same amount from the city for the building, when the work was stopped.

A memorial was addressed to the Legislature in 1867, asking for a new appropriation for its re-organization and support.

The school was under the charge and supervision of a Board of Directors that visited it, examined the classes, and reported annually to the State Superintendent of Public Education. It numbered more than one hundred on its register in daily attendance, and the interest in the school was annually increasing up to the time of its suspension.

It has recently been revived through the voluntary efforts of the State Superintendent and a few zealous teachers who have given their time and services to the instruction and training of the students assembled. One hundred and forty were in attendance in February, (1868). Normal classes have also been organized in some of the best schools and colleges in the State.

CITY NORMAL SCHOOL

AT ST. LOUIS, MISSOURI.

HISTORY AND ORGANIZATION.

THE St. Louis Normal School was opened in October, 1857, and placed under the charge of Richard Edwards, LL. D., now President of the Illinois Normal University. It continued under his superintendence as a distinct and separate school till the close of the year 1861, when the Board of Education, finding themselves in circumstances of great financial embarrassment, were obliged to effect a reduction in the expenses of the schools. For this reason, the Normal School was temporarily made a department of the High School, and Mr. Edwards became Principal of both, entering upon his duties as such in January, 1862. In March of the same year, Mr. Edwards resigned to take charge of the Illinois State Normal University. Mr. Thomas Metcalf then took charge of both schools till September, 1862, when they were again separated, and the Normal School was placed under the charge of one of its graduates, till January, 1863, when its present accomplished Principal, Miss Anna E. Brackett, was installed over the school.

This school is intended for the training of persons of both sexes who desire to become teachers in the public schools of the city.

The school is under the immediate supervision of a sub-committee appointed by the Board of Directors of the St. Louis Public Schools. This committee visit the Normal School, note the methods of discipline and instruction, and report at the close of each quarter, the condition and prospects of the school. The present faculty of the school consists of one Principal and two assistants, all ladies, and two part-time teachers for music and drawing.

ADMISSION OF STUDENTS.

All persons who have graduated at the High School, and other persons, residents of St. Louis, of the age of sixteen years and upwards, who pass an examination satisfactorily, in reading, writing, spelling, grammar, geography, arithmetic, algebra, history of the United States, and music, may be admitted to the school on subscribing a declaration, declaring their intention to devote themselves to the business of teaching in the public schools of St. Louis for at least two years; and pledging themselves to continue in the Normal School for at least one year.

COURSE OF STUDY.

The course of study requires two years. For the first or junior year, the studies are arithmetic, including mental and written; geography,

physical and political, with topography and the construction of maps; English grammar, composition, vocal music, drawing and penmanship, physiology, spelling and reading, with modes of teaching all.

For the second or senior year, the studies are algebra, composition, vocal music, drawing and writing, with modes of teaching these; geometry, mental philosophy, natural philosophy, history of English literature, theory and art of teaching, with teaching exercises before the whole school.

Calisthenic exercises form a part of each day's work through the course.

The members of the senior class give object-lessons to primary classes from the primary school in the same building. They also obtain practice in teaching and governing, by supplying vacancies in the public schools of the city, and reporting the work done, on their return, for discussion by the class.

The general character of the work of the Normal School may be inferred from the following extract from the last report of the Principal:

The Normal School presents this year a graduating class of 26, with the average age of 19 9-12. The junior class numbers 29, with the average age of 18 9-12, making the whole number 55, with an average age of 19 3-12. The whole number of pupils connected with the School during the year has been 79; the largest number at any one time, 68; the average number belonging, 66.

It is hoped and believed that the Board will find in the graduating class of this year faithful and efficient teachers, ready to help on the Schools of St. Louis to a higher and better standpoint than they have ever occupied. It has never been claimed by the friends of Normal Schools, that every graduate is a better teacher than any one who has not had special training; but simply that there is need of special training, and that a person with its advantages, will make a far better teacher than the same person without it.

It is self-evident that the only object in establishing and sustaining a Normal School, is that the public schools may be self-supporting and improved in standard: that is, that St. Louis need not be obliged to send for teachers from other cities and States, and that the schools may grow every year better. Its object thus exists outside of itself to a greater extent than that of any other school, and every thing in its studies and management must be made to subserve this object. Its teachers should be acquainted with the wants of the city schools, with the excellences and failures of their teachers, and should bend all their energies to the cultivation of those excellences and the prevention of those failures in their pupils.

Having then this special end in view, its training and management must essentially differ, in many particulars, from those of any other schools. No other can take its place or do its work, any more than a medical school can teach law, or a theological seminary, medicine. We are required not only to cultivate all womanly qualities, and to develop mental, moral, and physical powers, but beyond this, to call out and train certain qualities of mind indispensable to a good teacher; and regulations and methods are needed for this end, which would be out of place in a High or Grammar School.

The great difficulty which we meet on the threshold of our undertaking, is the general low estimate of the qualifications necessary for a teacher. Judging from daily experience, it would seem as if a large number of persons believed that all which was really necessary to secure one an appointment as a teacher of children, is the attainment of the sixteenth year, and the ability to answer correctly perhaps fifty per cent. of simple questions on the common English branches. For any other business they concede that there must be some training, some apprenticeship; but "anybody" can teach. Do we want our St. Louis schools to be taught by "anybody?" Do we want them to stand still, or to improve? Shall we trust the training of the children to those who have never had a thought on what is necessary for that training, who know nothing

of methods, who have had no opportunity to profit by the experience of others, and whose only object in applying for a situation as teacher, is drawing, I will not say earning, the salary attached thereto? or shall we do what in us lies to mature those minds, to develop them, to give them the results of the work of other teachers in the form of correct principles, on which they may base their daily work, some idea of its importance, and withal a love for it? There are some who have a special talent for teaching, we grant; but even a Raphael must learn the rules, and principles, and methods of painting, these being, in the same way, only the generalized experience of all who have preceded him.

If we desire our schools to be really good, we must have really good teachers, and no amount of special training is too much to fit them properly for their work. We do not trust an inexperienced blacksmith to shoe our horses' feet, and yet are willing to trust the education of our children's minds to anybody who happens to need the salary. Against this low estimate of the necessary qualifications all teachers of Normal Schools must protest, and to mature and develop those who are under their charge, to give higher and truer views of the responsibilities of their position, they work day by day and hour by hour.

The teachers must consider always three things: first, scholarship; second, moral character; and third, aptness to teach.

Of these qualifications we must judge. And when to these questions, which are to be decided concerning every graduate, we add the doubt as to whether she can govern her school, which we can best solve by discovering whether she can govern herself, the difficulties which are our daily work may be understood. We have comparatively a short time. Two years is not long to touch all these different springs, with many others, of which we have here no time to speak. In so far as we can decide by all the tests in our power, we do so. Often, too, the decided strength of some one or two of these qualifications may fully make amends for the want of others; for example, a decided aptness to teach may more than balance a want of book scholarship.

These tests should be applied more rigorously each year, so that our standard may be rising. Where there has been found, after careful consideration, any hopeless want, by the direction of the Teachers' Committee, members of the school have been advised to leave, and to give up the idea of teaching, and have done so; while others have been obliged to review their junior year, and thereby to extend their course to three years. While we regret the pain and disappointment to the individuals, simple justice to the school and to the interests of the city schools, demands this course.

The Normal School can not always fully act up to its standard, because we do not start with as good material as we should have. If we could begin with cultured and matured minds, we could present far better results.

As the students are principally from the city, most of them board at home, and no arrangements for board are made by the institution.

The diploma given to graduates of the school entitles them to an appointment as teachers of the public schools of the city without further examination.

The number of students the last year was sixty-five.

The number of graduates, eighteen.

The whole number of graduates is one hundred and fifty-seven.

CITY TRAINING SCHOOLS IN IOWA.

DAVENPORT, IOWA.

THE schools of Davenport have a high reputation for thoroughness of instruction and for successful results. Much of the success which has attended the operations of the school system in this city is the consequence of the special arrangements which have been made for the training of skillful teachers.

The Training School of Davenport was organized in September, 1863. It is under the general supervision of the Board of Education of the city, and the special direction of the city superintendent of schools. For two years after it was established, it was no extra expense to the city, the services of the pupil-teachers in the model or practice schools more than compensating for the extra expense of securing a trained and skillful Principal who could instruct and direct the pupil-teachers.

The number in the class is not limited; any one who is able to pass a creditable examination before the county superintendent may be admitted. The course of instruction is a year, and usually a new class is received at the beginning of each year. There is a nominal tuition fee of ten dollars a year.

The school has connected with it a model and practice-school of four rooms of fifty-six pupils each. The members of the Training School receive direct instruction from the Principal, in mental science, school economy, and the science of education and methods of teaching. About one hour and a half of each day is occupied with recitations in these branches, and the remainder of the time is passed in the model and practice-schools in observation and practice.

The pupil-teachers have regular classes in the schools of practice, which are changed occasionally; in the first term once a month, and in succeeding terms more frequently, if necessary to give each student an opportunity to practice in different grades and teach different branches. The instruction is similar to that given in the elementary training course at Oswego. It includes lessons with the children in the elements of natural science, object lessons, and the usual studies of common schools. With the exception of reading, most of the instruction is oral, being given without text-books. The lessons are carefully prepared by the pupil-teachers, and kindly criticised by the Principal, the good points being noticed, while the bad are corrected. The course has been found eminently useful in giving confidence and imparting skill to young teachers, while they become better acquainted with the philosophy of mind.

The public schools of the city are supplied almost entirely from the Training School.

OTTUMWA, HAPPELO COUNTY, IOWA.

The schools of Ottumwa were reorganized in the Autumn of 1865, under the supervision of L. M. Hastings, Jr., the city superintendent.

A fine public school building was completed that year, and the superintendent and School Board sought to adopt the best system of organization and instruction for the public schools. The schools were carefully graded under the personal supervision of the superintendent, and placed under the charge of such teachers as could be obtained. But it was found difficult to secure competent teachers, and the "old methods" of instruction were unsatisfactory to the superintendent and the School Board. The greatest drawback to the success of the system was "*poor teachers*." The superintendent gave much of his time and attention to training and instructing teachers, and some improvement was seen the second year in the methods of instruction. But other duties demanded the time of the Superintendent, and the Board, in 1867, authorized him to establish a Training School for the special preparation of teachers.

The Superintendent was successful in obtaining a competent and experienced teacher, and the Training School was opened in the Autumn of 1867. Miss Pride, the training teacher secured, was a graduate of the Normal and Training School at Oswego, N. Y. Three classes of the graded school, comprising about fifty pupils, were constituted a model and practicing-school, and placed under the charge of the training teacher.

This Normal Training School is expected to be a permanent institution, and though established primarily as a department of the schools of Ottumwa, is open to all qualified to enter. Those only are admitted who show a natural fitness for teaching, and have literary qualifications sufficient to admit them to the High School classes. Tuition is free to all students residing in the district; others pay a tuition fee of eight dollars per quarter.

The class which entered on the organization of the school, in 1867, consisted of twenty-two; five were teachers from the Ottumwa primary schools, sixteen young ladies and one young man were from the High School. Several of these High School students had taught before, and all were expecting to teach. They receive special instruction in methods of teaching the different branches taught in public schools, and then pass to the model and practice-school, where they put in practice the lessons received, conducting exercises in this department under the eye of the training teacher, who superintends the work and gives such counsel and directions as are needed.

During the last hour of the day the whole class of pupil-teachers meet for criticism lessons, and receive such suggestions and assistance from Miss Pride as are necessary to enable them to carry out the plans and employ the methods adopted.

As far as results can be estimated, they are very satisfactory. The

change for the better in the primary schools is already apparent, and the difference between the new methods and the old is already marked.

MANCHESTER, IOWA.

The Training Class at Manchester was organized in connection with the public schools in September, 1867. It was opened with two rooms, and the Superintendent, Prof. J. Piper, reports (1867) that "it bids fair to be a complete success." Though its primary object is to educate and train teachers for the public schools of that place, all candidates properly qualified are admitted so long as there is room. The teachers have an opportunity to pursue studies usually taught in public schools. Instruction is given by lessons and lectures in methods of teaching, school organization and systems of education, and the students occupy a portion of the time daily in observation and practice in the model and practice-schools. It is intended that the course of instruction and training shall be very thorough. The requisites for graduation are a good knowledge of school organization, the principles of education, and methods of instruction and training, with successful practice in all the grades of the model schools. Only skilled teachers will be approved.

CITY TRAINING SCHOOLS IN INDIANA.

INDIANAPOLIS, INDIANA.

THE Training School of Indianapolis was organized March 1st, 1867, and placed under the charge of Miss Amanda F. Funnell, a graduate of the Oswego Training School, and a former teacher in that school. The design of this school is to give to those who have already completed the academic course of study, an opportunity to pursue a thorough course of training in the principles and methods of oral instruction, and in the science of education and the art of teaching and governing schools.

The school was established with especial reference to meeting the demand for teachers in the schools of Indianapolis, and to furnish these schools with a supply of trained teachers. The Training School is supported from the public funds, as the other city public schools, and is under the supervision of the city superintendent of schools. The qualifications required for the admission of students are, good sound health, good moral character, and a good knowledge of the common English branches of study. The school has two departments, one of instruction, and one of observation and practice. In the former, the course includes the study of methods of teaching, reading, spelling, number, form, size, place, color; lessons on animals, plants, and objects; inventive drawing, language and geography. In connection with the study of methods, lessons are taken in mental philosophy, school economy, zoölogy and botany.

In the department of observation and practice, there are seven rooms, including the four primary and the two intermediate grades of the city schools, and a model school. These rooms are under the charge of three efficient and experienced critics and a model teacher. Each teacher employed as critic has the supervision of two rooms in which the members of the Training Department practice. The seventh room is intended for observation only, and is under the permanent instruction of the model teacher. The class of pupil-teachers is formed into two divisions, each division passing one-half of the time in each department. The time required for the course is one year.

The number of pupils is limited to twelve.

FORT WAYNE, INDIANA.

The Fort Wayne Training School was organized in August, 1867, having for its object the training of young ladies to take positions as teachers in the city schools. The instructors appointed were Miss Mary H. Swan, *Teacher of Methods*, and Miss Mary L. Hamilton, *Critic*; both graduates of the Oswego Training School, and both experienced teachers.

The school occupies one room for the teacher of methods, and five

school or practicing rooms, in each of which are forty-eight children. Ten young ladies, most of whom were graduates of the Fort Wayne High School, entered the first term. The students are divided into two sections, one of which is in charge of the teacher of methods in the morning, while the other is teaching in the practicing rooms under direction of the critic. The sections change places in the afternoon.

The teacher of methods gives lessons and lectures on the science of teaching, methods of teaching, number, primary arithmetic, place or geography, reading and language lessons, color, form and objects. An effort is made to present each subject objectively. Small classes of children are brought into the training room, and the teacher of methods gives an illustrative or model lesson on some one of the subjects under discussion, or calls upon some one of the pupil-teachers to give one, while the others are required to criticise the method and manner of giving it.

The pupil-teachers are also required to write out model lessons, stating the subject matter of the lesson, the various points to be made, the questions they would ask to bring out these points, also the probable answers of the children, &c.

The work of the critic-teacher is indicated by the name. She goes about from room to room in the department of practice and criticises the work of the pupil-teachers, offers suggestions and gives illustrative lessons. She has the general charge and oversight of the practicing rooms. The teachers of the Training School also render valuable aid to the city Superintendent of schools, by giving model lessons to the primary-teachers in the Teachers' Institute, which is held weekly.

The Superintendent of the public schools of Fort Wayne, James H. Smart, Esq., in speaking of this school, says :

The results of the work, so far, are very gratifying.

I. It is economical, five regular school-rooms being taken care of for less money than any other five rooms in the city.

II. The methods of instruction are an improvement over the old methods. We think that these rooms will, *at present*, compare quite favorably with any other rooms in the city.

III. We are training up a class of *home teachers* who, being acquainted with *our system*, can take new schools as they are established and teach them with a certainty of success.

EVANSVILLE, INDIANA.

The Training School at Evansville was established by the Board of Education of the city in 1867. Its primary object is the training and preparation of teachers for the public schools of Evansville, but it is believed that its influence will extend not only to the schools of the city, but to all places where the teachers graduating from this school shall be employed. It was fully organized by the appointment of Miss Abbie A. Locke as Principal, and opened Sept. 9th, 1867.

The general course of study is similar to that adopted at Indianapolis and Fort Wayne. It includes mental philosophy, methods of teaching the ordinary school studies, philosophy of education, school government, and those branches necessary to "the cultivation of the students as teachers and members of a social and accountable race."

CITY TRAINING SCHOOL

AT NEW HAVEN, CONN.

THE Training School of New Haven originated in the effort of the Superintendent of Schools, Ariel Parish, Esq., to give to young persons who were candidates for the position of teacher, an opportunity to observe for a time the methods of teaching and discipline in daily practice in the city public schools. During the first year of the experiment, the candidates had little opportunity to teach, but the advantages derived from the process of observation were such as fully to warrant the adoption of other measures more valuable and efficient.

The opening of a new school in 1867 afforded a favorable opportunity to provide actual instruction for young teachers, and to carry out the proposed plan without additional expense to the district. The school was placed under an accomplished teacher, formerly from the State Normal School at New Britain, and four rooms were placed under her charge.

The aims and purposes of this school can be learned from the following statement of the Superintendent:—

This school has been organized on its present basis,

1. To avoid the necessity of employing, in responsible positions, young persons entirely destitute of preparation and experience, with no means of improvement, except by crude experiments on the children in their teaching and government, without any one to aid or guide them. It is believed that the instruction and practice of a single term here will better fit them for their duties as teachers, than a year's experience in the ordinary mode of guess-work teaching.

2. To save beginners from failure—disastrous to their reputation as teachers, and a very serious loss to the District in the demoralization of the school.

3. To furnish them practice in teaching while learning how to perform the duties required, under the supervision of a competent teacher, who shall be able to correct their errors, point out their defects, give advice, and render all needful assistance. Under her instruction they learn how to organize a school, to classify the pupils, and so order the daily exercises as to secure a complete systematic performance of all duties pertaining to the school.

4. Especial care is taken to present the best methods of elementary instruction, in all the branches taught, by daily practice; also, to indicate sources of information in educational publications by which the experience of others may be called into requisition.

5. Special attention is given to that most difficult of all duties, school government. While the order and discipline of the room is left in the hands of the teacher, the Principal is always ready, in cases of emergency, to advise and render assistance. The dispositions of the children, their temperaments and habits, their probable home treatment, are made prominent subjects of study; also the best method of encouraging the pupils to a cheerful observance of all requirements. Judicious modes of punishment are carefully sought for, to meet all necessary cases where other measures fail.

6. This school comprises the first four grades, properly the primary depart-

ment, of the school system, and the young teachers are confined to these in their practice; yet the instruction they receive involves general principles which are applicable to all the higher grades, and with good judgment in their application, experience will in due time enable them to take charge of higher rooms, according to their qualifications.

7. Among the gratifying results of the experiment, thus far, are the thoroughness of the instruction and the progress of the children in their studies. These are due, first, to the efficiency of the Principal, who is never satisfied with partial success, whose watchful care suffers no pupil to be neglected; and second, to the earnest desire of the young teacher to perform her work successfully, knowing that she can have no better passport to promotion. Parents who witness from time to time the exercises of the classes and the general movements of the school, can not but feel satisfied with what is done for their children.

8. In view of the results, on the whole, in providing competent teachers from the pupils as they complete their studies in our schools; in the excellent instruction the children receive; and in the economy of the arrangement, costing, as it does, less expenditure of money than would be required to conduct the school in the ordinary way, I commend this enterprise to the attention of the Board, as one of the most influential elements we possess in strengthening and perfecting the whole system of our public schools.

CITY TRAINING SCHOOLS,

SAN FRANCISCO, CALIFORNIA.

I. STATE NORMAL TRAINING SCHOOL.

THE first Training School for teachers in the public schools of San Francisco was organized, September, 1865, in the lower rooms of the building occupied by the State Normal School. Such was the popularity of the school, that additional class-rooms became necessary, and a separate building was provided by the city, in 1867, capable of accommodating two hundred and seventy-five pupils. The Superintendent of Schools in San Francisco gives the following account of this school in his Report for the year ending October 15, 1867:—

The management of the school is intrusted to one Principal, Mrs. C. H. Stout, and two assistant teachers, who are all appointed by the City Board of Education.

As its title implies, the school is designed primarily for the training of Normal School students in the art of teaching. These are deputed to teach, each for one week at a time, and twice during the term, one of the six training classes. Before assuming charge of a class, the pupil teacher is required to spend a week in special preparation for her work. This she does usually by studying the course of study prescribed for the class, by inspecting the methods of teaching pursued by other teachers already plying their task, and by receiving the suggestions of the Principal in regard to the details of school management. For each of the six grades in the school there is provided a programme of recitations, which vary in length from ten to thirty minutes. The subject of each lesson in oral instruction is assigned by the Principal, and of this lesson an abstract must be prepared by the pupil teacher and be presented to the Principal for criticism, before the same be given to the class.

The subject of each lesson, the date of the recitation, and the name of the teacher conducting it, are recorded by the Principal in a book provided for this purpose.

At the close of the week the Normal pupil makes out a report of the methods of teaching she has employed, and of the number and nature of the class exercises she has conducted, accompanying her report with such remarks pertinent to teaching as she may desire to make. To this report the principal attaches her record of credits assigned to the teacher for her performance in the Training School. The aggregate of these credits forms one-third of the maximum or standard required for graduation in the State Normal School. The Principal and her two assistants, besides exercising a constant supervision of the work and directing the unskillful efforts of the pupil teacher, themselves illustrate the principles of pedagogy by an actual application in teaching.

The fear once expressed that the primary pupils of the school would suffer from the frequent change of teachers, all of whom were to be regarded as untried and inexperienced in teaching, has proved to be groundless. Whilst there is no doubt that an incalculable advantage has accrued from this school of practice to the Normal School, it must be admitted that no disadvantage has been entailed, whilst securing this benefit, upon the children who depend upon this school for the rudiments of knowledge. In proof of this assertion, it may

suffice to state that this school has been subjected to the same examination as other schools in the city of like grade, and that it has never made less than eighty-five per cent. in the semi-annual examinations of primary schools held by the City Board of Education. This fact reveals a degree of proficiency on the part of the Training School not surpassed by any other primary school in the Department. Deprived of this experimental school, the Normal School would be wanting in one important requisite of success, and without its aid but few Normal graduates could ever aspire to any distinction as skillful instructors. To the Normal School the State even now looks for its regular supply of teachers. Should these instructors fail in any essential part of their professional duty, the children of our citizens must suffer the consequences of such failure. Upon the success of these teachers the Normal School rests its claims for public favor, whilst to the Training School, supported by the enlightened liberality of our Board of Education, must ever attach a large share of whatever honor the Normal School graduates may reflect upon their *alma mater*.

II. CITY TRAINING SCHOOL.

In 1867, the City Board of Education established a Training School for teachers in connection with the Girls' High School, under the special charge of a Principal, (Mrs. A. E. DuBois,) and an assistant. Originally there was but one model class, with forty pupils; at the close of the first three months, there was an attendance of two hundred and four primary pupils, distributed in six class-rooms, taught by members of the Normal Class of the Girls' High School, who are drafted for this purpose every week, under the direction of the Normal Principal and her assistant.

The members of the Normal Class will now pass as teachers into the public schools of the city, or elsewhere, with some experience in the instruction and management of children, and with some test of their ability to govern a school.

CITY NORMAL AND TRAINING SCHOOL, OF BOSTON, MASS.

THIS institution was established in September, 1852, as a Normal School for girls, receiving pupils from the grammar schools of the city, and educating them with especial reference to their teaching in the public schools. In 1865, the plan of the school was somewhat modified, the course of study was enlarged, and the name changed to the Girls' High and Normal School. The branches usually taught in High schools, including the Latin, French and German languages, were embraced in the list of studies, but combined with these, were exercises particularly adapted for the instruction of those who desired to become teachers.

In May, 1864, the school committee authorized the employment of a special instructor in methods of teaching, and Miss Jennie H. Stickney, of the Salem State Normal School, and afterward of the Training School at Oswego, was appointed to the place. Three primary schools, of two classes each, containing the six grades of the Boston system, were set apart as practice schools, and the whole was designated the Training department, under Miss Stickney.

The pupil teachers pass about one-third of the time in study, one-third in recitation, and one-third in the practice school. The methods in this department partake largely of "Object Teaching," as best adapted to primary schools, and its work has been extended until it embraces most of the distinctly professional work of a Primary Normal School, for such pupils of the Girls' High School as propose to teach.

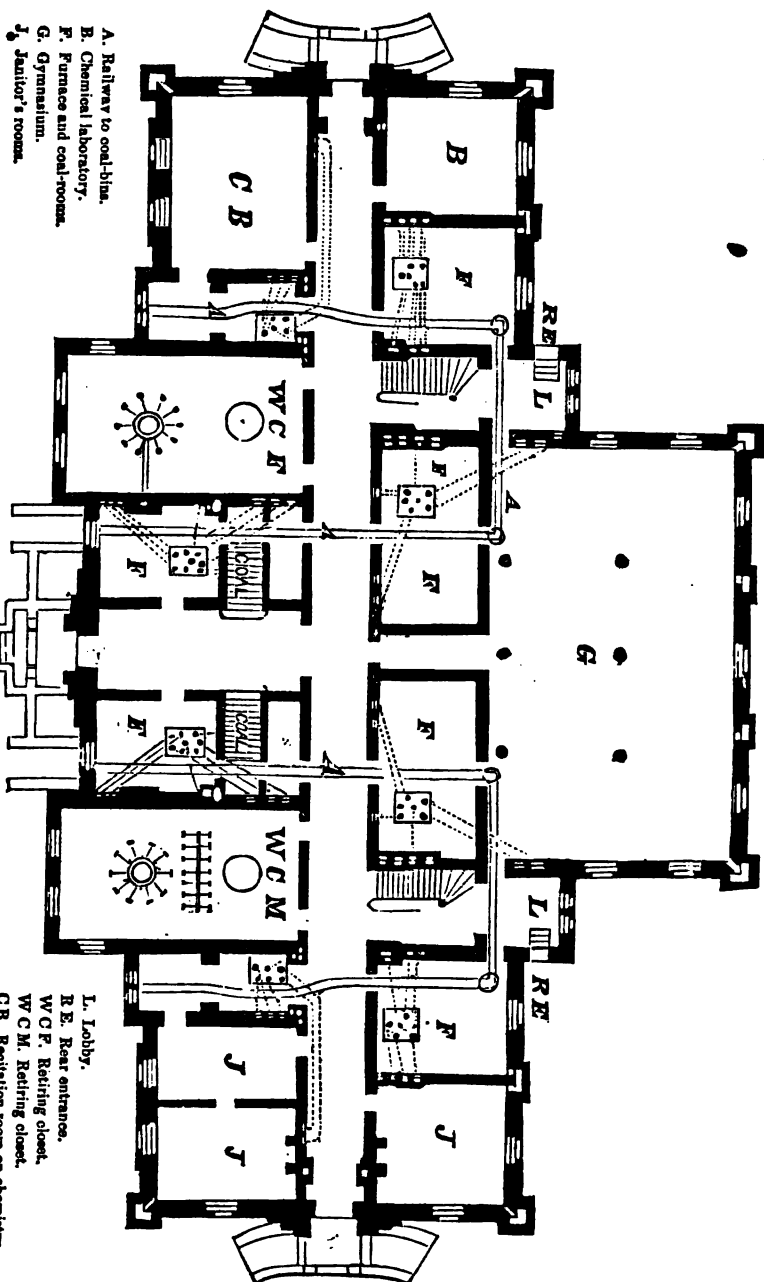
The superintendent of the Boston schools, Hon. J. D. Philbrick, in his fifteenth semi-annual report, says: "The Training department continues to merit the commendation which has heretofore been bestowed upon it. Our primary schools have been already greatly benefited by the services of the graduates of this school."

The average whole number of pupils belonging to the Girls' High and Normal School in 1867, was 332, forty more than in the preceding year. The average daily attendance was 322, and the per cent. of attendance, 96. Of 1,692 pupils admitted to this school from 1852 to 1865, 415 graduated, and 368 were employed as teachers in the public schools.

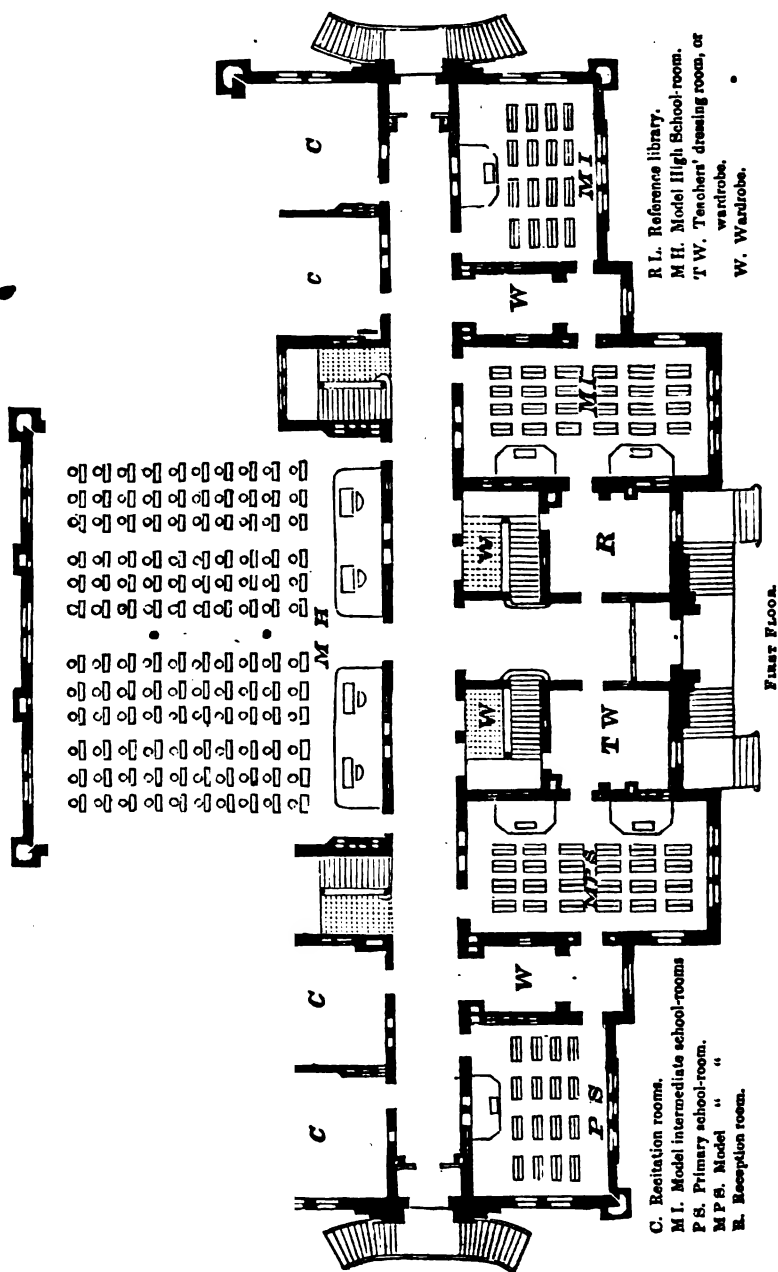
The Course of Studies in the Girls' High and Normal School will be found on the next page.*

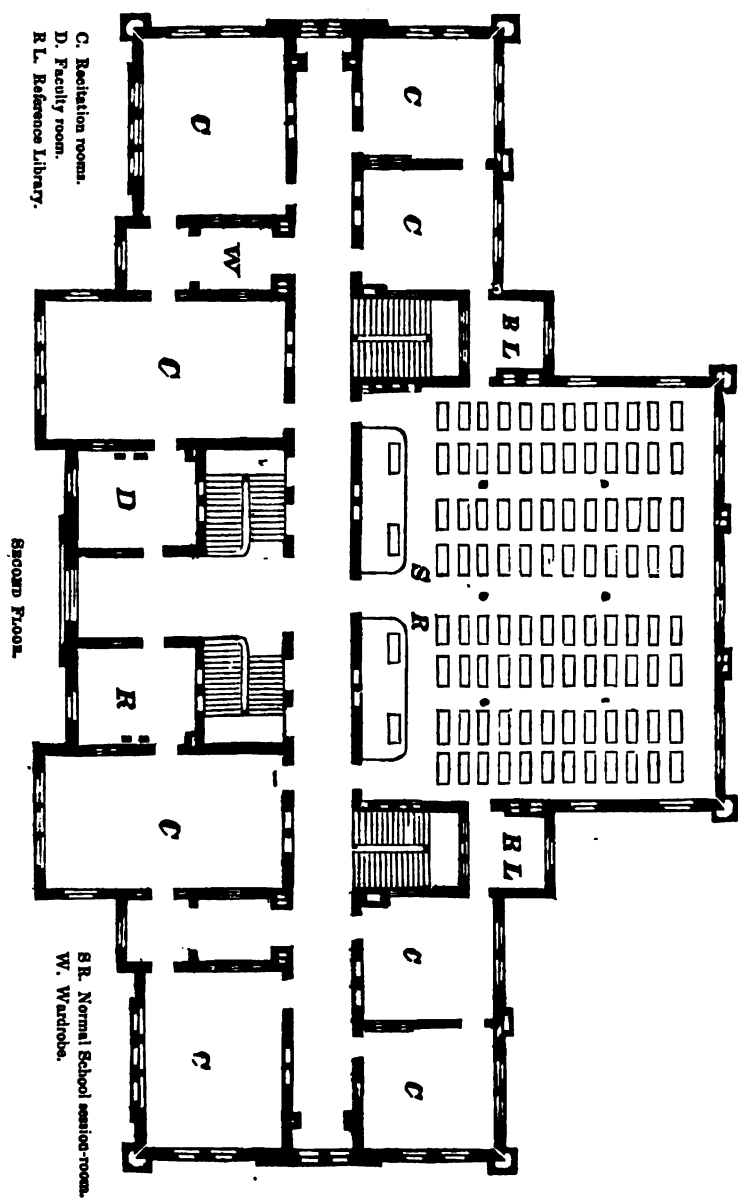
* An account of the Normal School for Girls, and the Girls' High School, with the antecedent history of female education in the Public Schools of Boston, will be found in *Barnard's American Journal of Education*—XIII, 218-80.

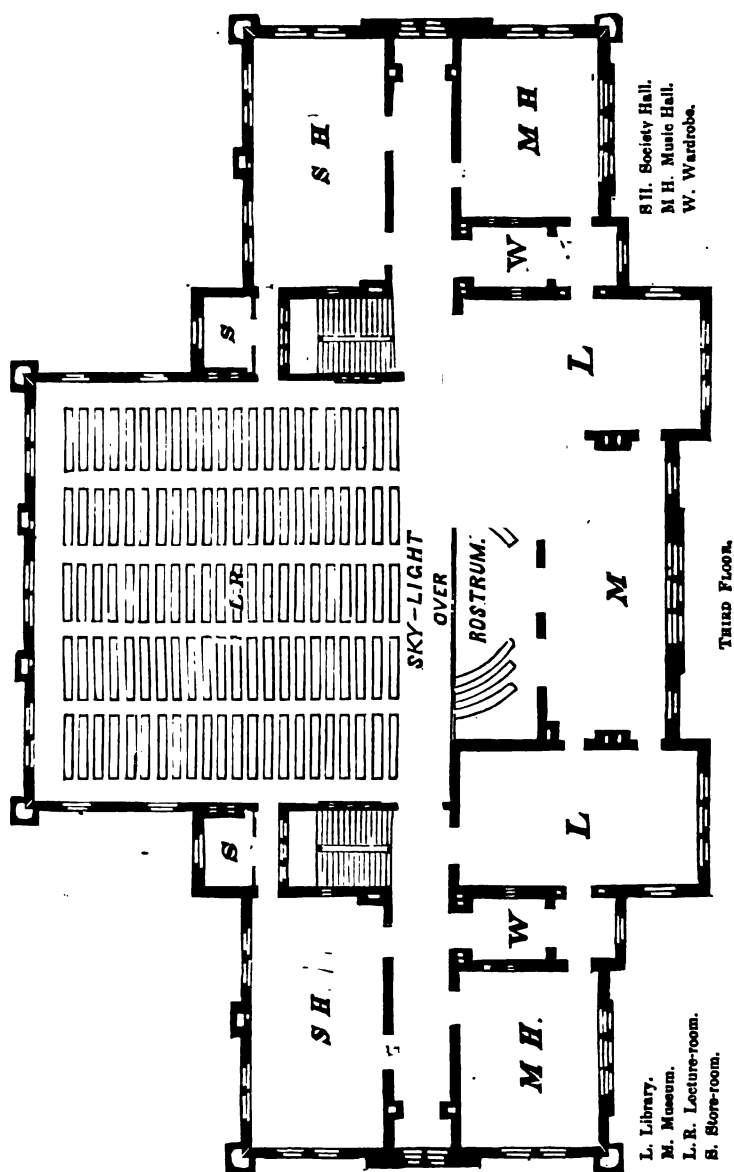
INDIANA STATE NORMAL SCHOOL. TENTH ANNUAL.



BASMENT PLAN.







INDEX TO VOLUME XVII

OF

BARNARD'S AMERICAN JOURNAL OF EDUCATION.

[NATIONAL SERIES, VOLUME I.]

- Academies, 82; Circular respecting, 561.
 Massachusetts policy of, 574.
 Academy of Science, etc., 86; Austria, 184.
 Accidents, by Lillie, 225.
 Adams, J. Q., School Reforms in Silesia 1804, 126.
 Admission of Scholars, 808.
 Agriculture, study of, by women, 638.
 Essay on, by Cowley, 334.
 Agricultural Schools, 523.
 Oldenburg, 523.
 Zurich, 359, 549.
 Alphabet, mode of teaching, 193.
 Alabama, 107.
 Constitution of 1819; of 1865, 108.
 Albany, Normal School at, 703.
 Altenstein, Ministry of Public Instruction, 441.
 Ames, A. E., School land policy in Minnesota, 69.
 American Academy of Arts and Science, 87.
 American Journal of Education, 9.
 Classified Index of Subjects, Vols. I.-XVI., 17.
 Apparatus and Library, in Austria, 153.
 Prussia, 556.
 Zurich, 374.
 Apprentice Schools in Austria, 167.
 Architecture, Schools of, Zurich, 369.
 Austria, 166.
 Arkansas, State of, 110.
 Constitution of 1833, 110.
 Arnold, Collection of Birds in 1774, 86.
 Archaeology, American, 427.
 Art, in Female Education, 636.
 Astronomical Observatory, cost of, 52.
 Attendance at School compulsory, 818, 581.
 Augustine, St., 626.
 Austria, public instruction in, 129.
 Secondary instruction, history of, 129, 136.
 Latin Schools prior to 1711, 129.
 Jesuits, Piarists, Benedictines, 129, 171.
 State Board of Education, 181.
 Teachers' Associations, 134.
 Statistics, 1823, 1833, 140.
 Present organization of Gymnasiums, 144.
 Results of present system, 157.
 Real Schools, 190.
 Hungarian princes, 169.
 Croatia, and Slavonia, 180.
 Transylvania, 181.
 Statistics, 182.
 Barnard, Henry, Commissioner of Education, 68.
 Plan of Journal of Ed'n, 9; Central Agency, 9.
 Teachers' Institute in Wisconsin, 755.
 Barring out the Schoolmaster, 318.
 Beautiful, the, in Female Education, 636.
 Bernhardt's Study Plan for a Gymnasium, 498.
 Benefactors of Education, Haynau, 175.
 Monson Academy, 567.
 Biography of Teachers, 38.
 Birch and Rod, 313.
 Blackboard, used in 1669, by Comenius, 193.
 in Cheshire, Conn. in 1801, 568.
 Blind, Schools for, 31.
 Boarding arrangements, 737.
 Boarding Schools in Austria, 184.
 Boarding round, in Connecticut, 621.
 Vermont, 186.
 Bohemia, Schools in, 181, 158.
 Boniface, St., 624.
 Bonner and the Rotherham Schools, 320.
 Bonitz, Hermann, 141.
 Boston, City Training School, 80.
 Boutwell, George S., 701.
 Brandenburg, province of, 459.
 Instructions, 493.
 Breslau, Pedagogic Seminary, 489.
 Bridgewater (Mass.) State Normal School, 689.
 Brinsley, John, Grammar School, 247.
 Brooks, Charles, and Normal Schools, 647, 664.
 Brougham, Henry, the Schoolmaster is abroad, 58.
 Bullock, Gov., Address on Normal Schools, 671.
 Burgher Schools of First Grade, 501, 517, 521.
 Busby, R., 239.
 Buxtorf, *Epitome*, 237.
 California, 119. Constitution of 1849, 119.
 State and City Normal School, 769, 819.
 Cabinets of Natural History, &c., 83, 506, 547.
 Catechumens, 499.
 Canada, Upper, Public Instruction in, 581, 592.
 Calligraphy, 316.
 Calfe, Plan of Library for Masters' use, 818.
 Carter, J. G., and Normal Schools, 661.
 Castine (Maine) State Normal School, 778.
 Cato's Distichs, in English and Latin, 291.
 Cellarius, and a Teachers' Seminary at Halle, 484.
 Central Agency of Education in 1842-54, 11.
 Channing, W. E., early Schools of, 189.
 Chapters of Teachers in Zurich, 553.
 Charleston (S. C.) State Normal School, 737.
 Cheshire, Episcopal Academy, 556.
 Chemistry, School of, 371.
 in Austria, 166.
 Chronological review of Gymnasiums, 508.
 City Training Schools, 808, 809, 812.
 City School Organization in Prussia, 460.
 Magdeburg order of visitation, 483.
 Class Book of Discipline in Austria, 153.
 Classes, Number in Austria, 153.
 in Prussian Gymnasiums, 498.
 Class professors in Germany, 499.
 Classification of pupils in Austria, 153.
 Oldenburg, 529.
 Prussia, 493, 572.
 Zurich, 338, 343.
 Clergy, the, and Popular Education, 219, 644.
 Coast Survey, cost of, 52.
 Cochran, D. H., and N. Y. Normal School, 711.
 Co-education of the sexes, 395.
 Advantages of, 238.
 Disadvantages considered, 392.
 Experience of the Friends' Schools, 397.
 Commissioner of Education appointed, 68.
 Compulsory school attendance, 53, 325.
 Zurich law, 338.

- Connecticut, early educational history, 88, 216, 607.
 Statistical data, 88.
 Constitution of 1818, 89.
 School Fund, 89; Normal School, 655.
 Conector in German Gymnasiums, 470.
 Constitutional provision respecting education, 81.
 Conant, M., and Normal Schools, 689.
 Commercial Academy in Austria, 160.
 Compagnon, 461.
 Common Place Book, 243.
 Corporal punishment, 313, 560, 608.
 Forbidden in Austria, 134.
 Cowley, Abram, 325.
 Plan of Philosophical College, 327.
 Essay on Agriculture, 334.
 School of Agriculture, 335.
 Concert Recitations, 415.
 Cousin's tribute to Prussian Schools, 444.
 Courses of Study, Elementary School, 325.
 Gymnasiums, 357, 495.
 Normal Schools, 334.
 Real-Schools, 502.
 Croatia, Schools in, 180.
 Curiosity, aim of Teachers to excite, 642.
 Curriculum Vitæ, in Prussia, 478.

 D'Aguesseau, value of minutes, 640.
 Dame, Nathan, Report on Academies, 574.
 Dame's School, 556.
 Dante on Early Rising, 639.
 Davenport (Iowa) City Training School, 523.
 Deaf mutes, Schools for the, 62.
 Delaware, 84.
 Constitution of 1831, 94.
 Denominational Schools, 84.
 Department of Education, 68.
 Detention after School, 506.
 Diary of Study and Religious Culture, 637.
 Dickenson, J. W., Philosophy of Teaching, 381.
 Dilworth's Spelling, 219.
 Directors of Prussian Gymnasiums, 464.
 Dinter, Official duty to Education, 61.
 Discipline, Austria, 163.
 Prussia, 506.
 Docendo Discimus, 408.
 Drawing, in Austria, 165.
 Teachers of, in Prussia, 493.
 in Female Education, 683, 686.
 Dramatic Exercises, 567.
 Duff, Grant, 595.
 Dupanloup (Bishop.) Studious Women, 623.
 Thoughts on Female Education, 623.
 Dwight, Edmund, 693.
 Henry E., on Prussian Schools, 641.
 Timothy, 185, 223.
 N., Geography, 220.

 Edinboro' (Penn.) Normal School at, 758.
 Eichhorn's administration of Schools, 444.
 Eller, G., 416.
 Elliott, John, and Schools, 215.
 Emerson, G. B., Lesson of the hour, 662.
 Normal School Advocate, 665.
 Emporia (Kansas) Normal School, 771.
 Erasmus, *De ratione Institutiendi*, 271.
 Ethnology, American, 424.
 Plan for a General Society, 425; Museums, 428.
 Exchange of Programmes and Documents, 506.
 Expulsion as Discipline, 506.
 Explanations to Children, 421.
 Evansville (Ind.) City Training School, 516.
 Everett, E., Normal School, 564.
 Examinations of Teachers in Prussia, 475.
 Examen pro loco, 475.
 Examen pro facultate docendi, 477, 481.
 Examen per ascensione, 477.
 Curriculum Vitæ, 478.
 Condition, 481.
 Trial year, 489.
 Exner and Austrian Schools, 140, 163.

 Factory Children, Zurich, 342.
 Facultas Docendi, in Prussia, 478.
 Faculties, order in the development of, 417.
 Faith, faculty of, 419.
 Fairchild, J. H., co-education of the sexes, 386.
 Farmington (Maine) State Normal School, 777.
 Farnum preparatory Normal School, 738.
 Farnaby's Index rhetoricas, 268.
 Felbiger, Educational Reform in Silesia, 126.
 Female principalship of Normal School, 672.
 Teachers, 672, 679; Education, 622.
 Handiwork in Schools, 533.
 Ferdinand I., and Schools of Austria, 139.
 Feuchtereleben, and Austrian Schools, 140, 161.
 Final Examinations in Prussia, 479.
 Florida, 112.
 Constitution of 1839, 112; of 1865, 112.
 Fort Wayne City Training School, 815.
 Fowler, W. C., Schools as they were in Conn., 211.
 The Clergy and popular Education, 211.
 Forestry, School of, 372.
 France, School statistics in 1865, 61.
 Francis I and Schools of Austria, 135.
 Framingham State Normal School, 659.
 Fraser, J., on Training Schools of England, 795.
 Frederic I. and Schools, 436.
 Frederic II., 436.
 Frederic William I., 436.
 Frederic William III., 438.
 French Language in Prussia, 493, 495.
 French Views of Female Education, 622.
 Funds for Education in Austria, 156.
 Zurich, 348, 536.

 Gallaudet, T. H., and Normal Schools, 664.
 Garfield, James A., on National Education, 49.
 Gedike, 475, 487.
 Georgia, 77, 99.
 Early land policy, 65.
 Constitution of 1789, 99.
 German language in Austria, 149, 164.
 in Prussia, 497.
 Geography and History in Austria, 150, 165.
 in Prussia, 479.
 George, Elector John, 436, 460.
 German Universalists, 595.
 Relations to the Gymnasium, 599.
 Prolonged attendance at, 602.
 Gorman, Willis A., land policy of Minnesota, 70.
 Government and Education, 314.
 Punishment and Prevention, 315.
 Taxation for Schools, 313.
 Gradation of pupils, 153.
 Grammar School of England in 1693, 225, 233.
 Hooke's Method of teaching, 226.
 Method of founding, 233.
 Greek in Austrian Schools, 148.
 in Prussian Gymnasiums, 497.
 Guizot, education of the people, 69.
 Gymnasial Journal in Austria, 143.
 Gymnasium in Austria, 129, 144.
 Oldenburg, 522.
 Prussia, 433, 515.
 Zurich, 357.
 Gymnastics, instruction in Prussia, 494, 500.
 Teachers of, in Prussia, 233.
 Guizot on Normal Schools, 900.

 Hale, Sir Mathew, plan of Education, 77.
 Hall, S. R., and Normal Schools, 662.
 Hammond, C., 568.
 Hallaschka, and Austrian Schools, 139.
 Halle, Pedagogic Seminary, 439.
 Hart, John S. and Normal Schools, 401, 732.
 Professional Education of Teachers, 401.
 Harvard College, 85, 190.
 Hartlib, Samuel, 334.
 Haynan, benefactions of, 175.
 Heating Apparatus, 551.
 Hebrew, in Prussian Gymnasiums, 493.
 Hecker, J. Julius, and Real-Schools, 501.

- Henry, Patrick, 94.
 History, Teachers of, trained in Prussia, 496.
 Hodder, James, 815.
 Hohenzollern, district of, 455.
 Home Education, 35.
 Hoole, Charles, 192.
 on Object-teaching, 192.
 the Petty School, 193.
 the Grammar School, 225.
 Usher's duty, 228.
 the Master's method, 227.
 Scholastic discipline, 295.
 Principles of School management, 333.
 Horn-book in Delaware, 187.
 in N. York, 555.
 Hours of Instruction in England in 1660, 801.
 Zurich, 532.
 Hulburd, C. T., and Normal Schools, 705.
 Humboldt, William Von, 449.
 Hungary, Public Schools, 169.
 Husbandry, knowledge of, for all, 79, 834.
 Hypatia, 524.
 Idiots, schools for, 31.
 Ignorance, dangers of, to woman, 628.
 Illinois, 107.
 Constitution, 107.
 Normal University, 745.
 Indianapolis, Ind., City Training School, 815.
 Incarceration as discipline, 508.
 Indiana, 104.
 Constitution of 1815, 105; of 1851, 105.
 State Normal School, 781.
 Industry, School of, 338.
 Institutes, Teacher's, 755.
 Wisconsin, 755.
 Ohio, 838.
 Iowa, 115.
 Constitution of 1345, 115; of 1857, 115.
 State Normal School, 745.
 City Training School, 811.
 Janitors of Prussian gymnasiums, 478.
 Jefferson, T., ordinance of 1784, 93.
 School Bill for Virginia, 95.
 Letter to Washington, 45.
 Letter to J. C. Cabell, 98.
 Professorship of Agriculture, 45.
 Jesuits, Schools of Austria, 124, 171.
 Johnson (Vt.) State Normal School, 790.
 Johnson, Samuel, public land, and education, 66.
 Joseph I. and Schools of Austria, 131.
 Joseph II. and Schools of Austria, 133.
 Kansas, 121.
 Educational land grants, 78.
 Constitution of 1859, 121.
 Normal School, 771.
 Kentucky, 77, 100.
 Constitution of 1850, 100.
 Kleesman, 142.
 Kussnacht, Normal School at, 851.
 Kutztown, (Pa.), Normal School at, 754.
 Lang, I. F., and Austrian Schools, 135.
 Land Policy of United States, 65.
 Language employed in instruction, 144.
 Latin, study of, in Austria, 133, 148.
 Prussia, 496.
 Composition, 405, 493.
 in German Gymnasiums, 493.
 Method of study by Hoole, 227.
 Lebanon, Ohio, State Normal School, 796.
 Leather Spectacles, for discipline, 189.
 Lee, Richard B., tribute to New England, 94.
 Legislators and National Education, 51.
 Leopold II., and Austrian Schools, 131.
 Lewis, Samuel, and Normal Schools, 793, 805.
 Lillie's Grammar, 261.
 Lindsey, Philip, and Teachers' Seminaries, 729.
 Literature in Female Education, 635.
 Lioba, 624.
 Lombardy and Venice, School statistics, 140, 182.
 Lorinser on Health in Gymnasiums, 494.
 Louisiana, 102.
 Constitution of 1845, 103; 1852, 103; 1864, 104.
 State and City Normal School, 800.
 Lycea in Austria, 136.
 Maine, 91.
 Constitution of 1820, 91.
 Normal School system, 785.
 Magyar schools, 174, 179.
 Manchester (Iowa) City Training School, 814.
 Mann, Horace, cited, 51.
 Normal School Advocate, 664, 692, 801.
 Address at Bridgewater, 698.
 Mansfield (Pa.) Normal School, 753.
 Manners and Good Behavior, 220.
 Maria Theresa, and Schools of Austria, 131, 170.
 Master's Method, by C. Hoole, 237.
 Maryland, 97.
 Constitution of 1864, 97; of 1867, 98.
 State Normal School, 719.
 Mathematics in Austria, 150, 165.
 Prussia, 497.
 Massachusetts, 83.
 Early Educational history, 83.
 Constitution of 1780, 86.
 Amendment of 1857, 86.
 Normal School System, 667.
 Policy of Academies, 574.
 Maturity Examination in Prussia, 449, 492.
 Austria, 155.
 Zurich, 539.
 Martini, and Austrian Schools, 184.
 Marx, Gratian, 132.
 Mathematics, Teachers for, trained, 486.
 Matile, George, 424.
 May, S. J., and Normal Schools, 667.
 Mental Philosophy in Prussian Gymnasiums, 496.
 Mechanics and School of Industry, 871.
 Memory, the cultivation of, 413.
 Methodical Order, value of, 639.
 Michigan, 110.
 Constitution of 1837, 111; of 1850, 111.
 State Normal School, 719.
 Milan (Ohio) Normal School, 794.
 Military Schools, 84.
 Millersville (Pa.) Normal School, 752.
 Mill, J. S., Government and Education, 57.
 Milton, John, cited, 58.
 Minnesota, 119.
 Educational Land Grants, 69, 74.
 Constitutional provision, 70, 119.
 Normal School, 761.
 Mississippi, 101.
 Constitution of 1817, 107.
 Missouri, 108.
 Constitution of 1820, 108; of 1865, 108.
 Normal Schools, 809.
 Moral Education, 34.
 Monson (Mass.) Academy, 563.
 Instructors of, 563.
 Benefactors, 567.
 Departments of instruction, 568.
 Montalembert on Female Education, 625.
 Montgomery, Miss E., Schools of Wilmington, 187.
 Models, Workshop for making, 874.
 Monitors of attendance, 311.
 Morality, Ideas of, in Austrian Schools, 183.
 Muhler, Von, Ministry in Prussia, 447.
 Mulcaster, Richard, 227, 298.
 Positions cited, 298.
 Music, Teachers of, in Prussia, 483.
 in Female Education, 633.
 National recognition of Education, 41.
 University proposed in 1787, 41.
 Natural History in Austrian Schools, 151.
 Prussia, 487.
 Naval Schools, 84.

- Navigation Schools in Oldenburg, 523.
 Nebraska, 124.
 Constitution of 1857, 124.
 State Normal School, 791.
 Nevada, 123.
 Constitution of 1864, 123.
 Needle-work for girls, 168.
 New discovery of the Old Art of Teaching, 307.
 New Hampshire, 90.
 Constitution of 1784, 90.
 Agricultural Land Grant, 185.
 College of Agriculture, 185.
 New Haven Colony, 216.
 New Haven City Training School, 817.
 New England Primer, 219.
 New Jersey, 92.
 Constitution of 1796, 92.
 State Normal School, 727.
 New Orleans, Normal School at, 808.
 New York, 92.
 Constitutions of 1822 and 1846, 92.
 State Normal Schools, 703, 713.
 Newell, M. A., 779.
 Nicolovius, 440.
 Niles, Master Sands, School, 607.
 Studies and Discipline, 608.
 Normal School defined and described, 401.
 Normal Education, special objects of, 797.
 Results of, 793.
 Normal Institutes, 803.
 Normal School Buildings,
 Albany, 709.
 Bridgewater, 691.
 Charleston, 786.
 Framlingham, 659, 690.
 Illinois, 746.
 New Jersey, 739.
 Oswego, 717.
 Salem, 684.
 Terre Haute, 782.
 Trenton, 739.
 Westfield, 683.
 Winona, 766.
 Normal Schools under State auspices, 657.
 California, 769.
 Connecticut, 665, 799.
 Delaware, 807.
 Illinois, 745.
 Indiana, 781, 812.
 Iowa, 725.
 Kansas, 771.
 Maine, 773.
 Louisiana, 808.
 Maryland, 777.
 Massachusetts, 657.
 Minnesota, 761.
 Missouri, 809.
 Nebraska, 791.
 New Jersey, 729.
 New York, 703.
 Ohio, 783.
 Oldenburg, 523.
 Pennsylvania, 753.
 Vermont, 780.
 West Virginia, 806.
 Prussia, for Gymnasial teachers, 441.
 Zurich, 345, 355, 361.
 England, 793.
 Normal Schools for City Teachers, 809, 817.
 Boston, 821.
 New Haven, 817.
 St. Louis, 809.
 Indianapolis, 813.
 North Carolina, 98.
 Constitution of 1776, 99.
 Northrop, B. G., Results of Normal Schools, 799.
 Nowell, Catechism in Greek, 230.
 Oberlin College, 400.
 Plan of Female Education, 866.
 Obligatory Studies, 147.
 Ohio, 101.
 Ordinance relating to Public Land, 65.
 Constitution of 1802, 102; of 1861, 102.
 Normal Schools, 791, 796.
 Oldenburg, Grand Duchy, 519.
 Public instruction, 519.
 Elementary Schools, 519.
 Burgher Schools, 520.
 Secondary Schools, 522.
 Special Schools, 523.
 Infant Schools, 521.
 Optional Branches, in Austria, 187, 147, 156.
 Orbis Pictus, of Comenius, 227.
 Ordinance of Congress in 1785, 41, 68.
 Oregon, 120.
 Constitution of 1857, 120.
 Oswego (N. Y.) State Normal School, 713.
 Plan of Building, 713.
 Oxford, (Eng.,) Endowment of, 606.
 Page, D. P., Normal School Work, 706.
 Parents, duty of, 645.
 Patterson, Mark, 597.
 Parochial School in Austria, 163.
 Paula, 624.
 Pedagogic's Chair, at Halle, 437.
 Pedagogic Seminaries, 155, 437.
 Institute and Seminary at Vienna, 155.
 Royal Institution at Berlin, 437.
 Seminary at Stettin, 438.
 Seminary at Halle, 439.
 Pedagogium at Magdeburg, 439.
 Pennsylvania, 93.
 Constitution of 1790, 93.
 System of Normal Schools, 752.
 Penmanship, 815.
 Pension of Teachers in Prussia, 474.
 Austria, 158.
 France, 61.
 Zurich, 553.
 Perkins, George R., 710.
 Peru (Nebraska) State Normal School, 791.
 Petty School by Charles Hoole, 196.
 Alphabet, spelling, writing, discipline, 196.
 Phelps, W. T. and Normal School, 733, 763.
 Phelps, Mrs. Almira Lincoln, 611.
 Portrait of, 609.
 Memoir, 611.
 List of Publications, 620.
 First Experience as a Teacher, 621.
 Philology, 36.
 Philological Seminaries, Prussia, 496.
 Philosophy and Art of teaching, 155, 381.
 Philosophy and Psychology, 153, 496.
 Philosophical Course and Schools, 136, 178.
 Physical Education, 35, 500.
 Physics, Austria, 150, 155.
 Piano, useless practice on, 633.
 Pianists, in Austria, 129.
 Pierce, Cyrus, 656.
 Pinckney on National University, 11.
 Plan of Grammar Schools in 1686, 296.
 Plans of Instruction in Austria, 143, 166.
 Prussia, 452.
 Zurich, 553.
 Oldenburg, 520.
 Plan of Life, for Women, 638.
 Plan of Lesson, general principles, 493.
 Austria, 143.
 Platteville (Wis.) State Normal School, 758.
 Play-day, granting of, 302.
 Political Science, School of, 572.
 Pomerania, province of, 452.
 Polytechnic School at Zurich, 809.
 Portraits of Teachers, 38.
 Bishop, N., 209.
 Garfield, J. A., 1.
 Phelps, Mrs. A., 609.
 Ryerson, E., 577.
 Posen, province of, 499.
 Private Schools in Austria, 154.

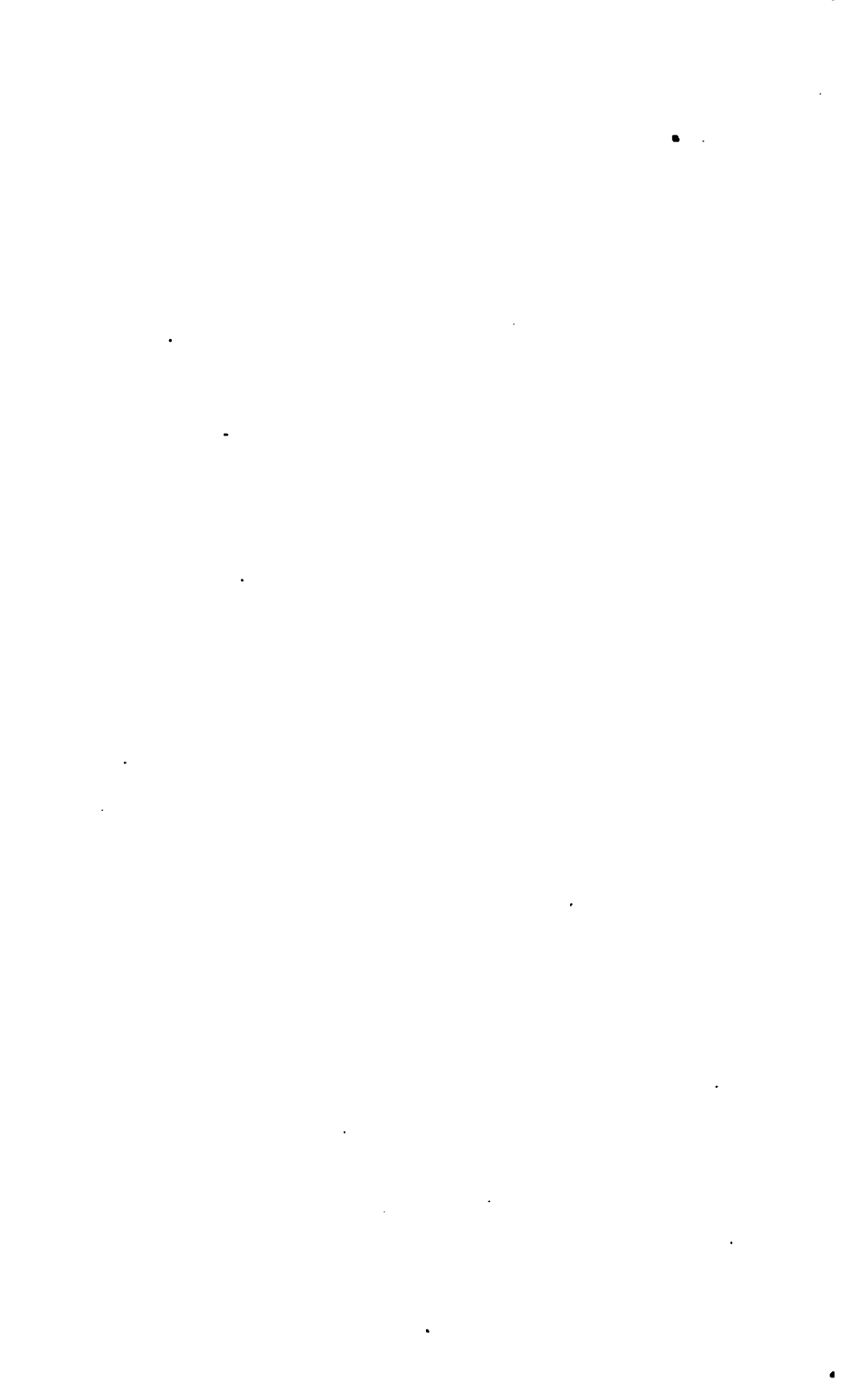
- Private Schools in Oldenburg, 631.
 Prussia, 507.
 Zurich, 890, 582.
 Primary Schools, 843.
 Oldenburg, 618.
 Hungary, 177.
 Zurich, 811.
 Prussia, 438.
 Early School movements, 483.
 Privileges of a Diploma, 507.
 Programmes of Schools, 504.
 System of exchange, 506.
 Protestantism and Popular Education, 218.
 Probation Book of Merchant Tailors' School, 262.
 Professional Schools, 509.
 Professional Training of Teachers, 653.
 Professor, Title of, in Prussia, 471.
 Progymnasium in Prussia, 518.
 Prussia, Province of, 449.
 Prussia, Kingdom, 433.
 Tribute to System of Education, 645, 647.
 System of Secondary Schools, 438.
 Local Administration, 460.
 City Deligacy, 491.
 Teachers, 463.
 Examination, 474.
 Plans of Study in 1837 and 1857, 496.
 Scholastic year, 503.
 Vacations, 504.
 Programmes, 504.
 Books of Reference, 505.
 Discipline, 505.
 Position in Classes, 516.
 Privileges of Graduates, 507.
 Chronological Review, 508.
 Classification by Provinces, 515.
 Teachers' Seminaries, 641, 647.
 Public Schools, Land Reservation, 68.
 Punishment and Prevention, 813, 828.
 Puritanism and Popular Education, 214.
- Questioning, art of, 409.
 Example of, 411.
- Ramsey, Governor of Minnesota, 71.
 Randolph (Vt.), State Normal School, 790.
 Read and write, ability to, in an Elector, 82, 88.
 Reading, how taught, Hoole's system, 201.
 Reasoning, training of, 420.
 Real Gymnasium, 501.
 Real-School, 160, 844, 501.
 Austria, 160.
 Prussia, 501, 517.
 Zurich, 844.
 Plan of Studies, 502.
 Recitations, thoughts on hearing, 415.
 Reformation in Germany, 508.
 Schools before, 506.
 Regular Attendance, how secured, 841.
 Religion in Prussian Gymnasiums, 498.
 Austria, 151.
 Zurich, 638.
 Religious instruction, 498, 637.
 Discipline of, 34, 499.
 Morality and knowledge, 329.
 Reference, Books of, 817, 505.
 Renan, F., on Paris professors, 596.
 Repetitions, 807.
 Repetition School in Zurich, 844.
 Research and Instruction, union of, 598.
 Rhine, province of, 455.
 Rhode Island, 91.
 Constitution of 1842, 91.
 Results of Normal School, 799.
 Right bringing up of Girls, 634.
 Rockwell, John A., and Public Land, 63.
 Ryerson, E., Memoir and Portrait, 577.
 Value of Normal Schools, 798.
 Rotherham School, 820.
- Sabbath School Teachers, 409.
- Salem (Mass.) State Normal School, 697.
 San Francisco, City Normal School, 819.
 Saxony, Province of, 453.
 Salaries of Teachers in Austria, 158, 168.
 Prussia, 473.
 Zurich, 848, 552.
 Oldenburg, 552.
 Shemerlin's Ministry, 148.
 School Architecture, Normal Schools, 690, 688, 717, 740, 747, 765, 822.
 Austria, 156, 187.
 Prussia, 645.
 Zurich, 851.
 School Fund, 65.
 Connecticut, 89.
 Zurich, 848, 368, 537.
 School Land, 65, 72.
 Schools as they were sixty years ago, 5th Art., 134.
 Sixth Article, 555, 607.
 Schoolmasters social position in Conn., 217.
 School-books, old, 268, 275, 278.
 School of Practical Science, 831.
 Scholastic Discipline, by Hoole, 238.
 Schulze, J., 441.
 Scuckmann, 441.
 Sclavonia Public School, 180.
 Secondary Schools, Austria, 129, 144, 160.
 Oldenburg, 522.
 Prussia, 433.
 Zurich, 351, 357, 535.
 Seaton, Samuel W., Reminiscences of Schools, 555.
 Seating of Scholars, 304.
 Self-Education, 35.
 Seminary for Teachers of Gymnasiums, 155, 484.
 Halle, under Wolfe, 434.
 Königsberg, under Erfurt, 485.
 Berlin, under Bockh, Buttman, Lachmann, 485.
 Greifswalde, under Meier, Schomann, 485.
 Breslau, under Schneider, Passow, Roosbach, 485.
 Bonn, under Nake, Heinrich, 485.
 Münster, under Nadermann, 486.
 Vienna, 155.
 Seber, F. J., 458.
 Sexes, Co-education of, Oberlin, Ohio, 885.
 Zurich, 842.
 Shaw, John A., 695.
 Silesia, Province of, 125, 451.
 St. Louis Normal School, 809.
 Smith, William, at Cheshire, Ct., 557.
 Social position of Teachers, 217.
 Society, Duties of, 638.
 South Carolina, 89.
 State Normal School, 787.
 Special Schools, 83.
 Spelling, Method of teaching, 198.
 Choosing Slides, 609.
 Sparks, Michael, Janus Latine Linguae, 264.
 State Supervision, Austria, 132, 144.
 Oldenburg, 518.
 Prussia, 452.
 Zurich, 523.
 Statistics of Gymnasiums, Austria, 140, 144, 157, Prussia, 508.
 Zurich, 852.
 Statistics of Elementary Schools, Austria, 177, 181.
 Canada, 591.
 France, 61.
 Oldenburg, 62.
 Zurich, 849.
 Statistics of Secondary Schools, Austria, 157, 177, 181, 182.
 Canada, 592.
 France, 61.
 Oldenburg, 522.
 Prussia, 514.
 Zurich, 853.
 Statistics of Real Schools, Austria, 167, 181.
 Oldenburg, 522.
 Prussia, 517.

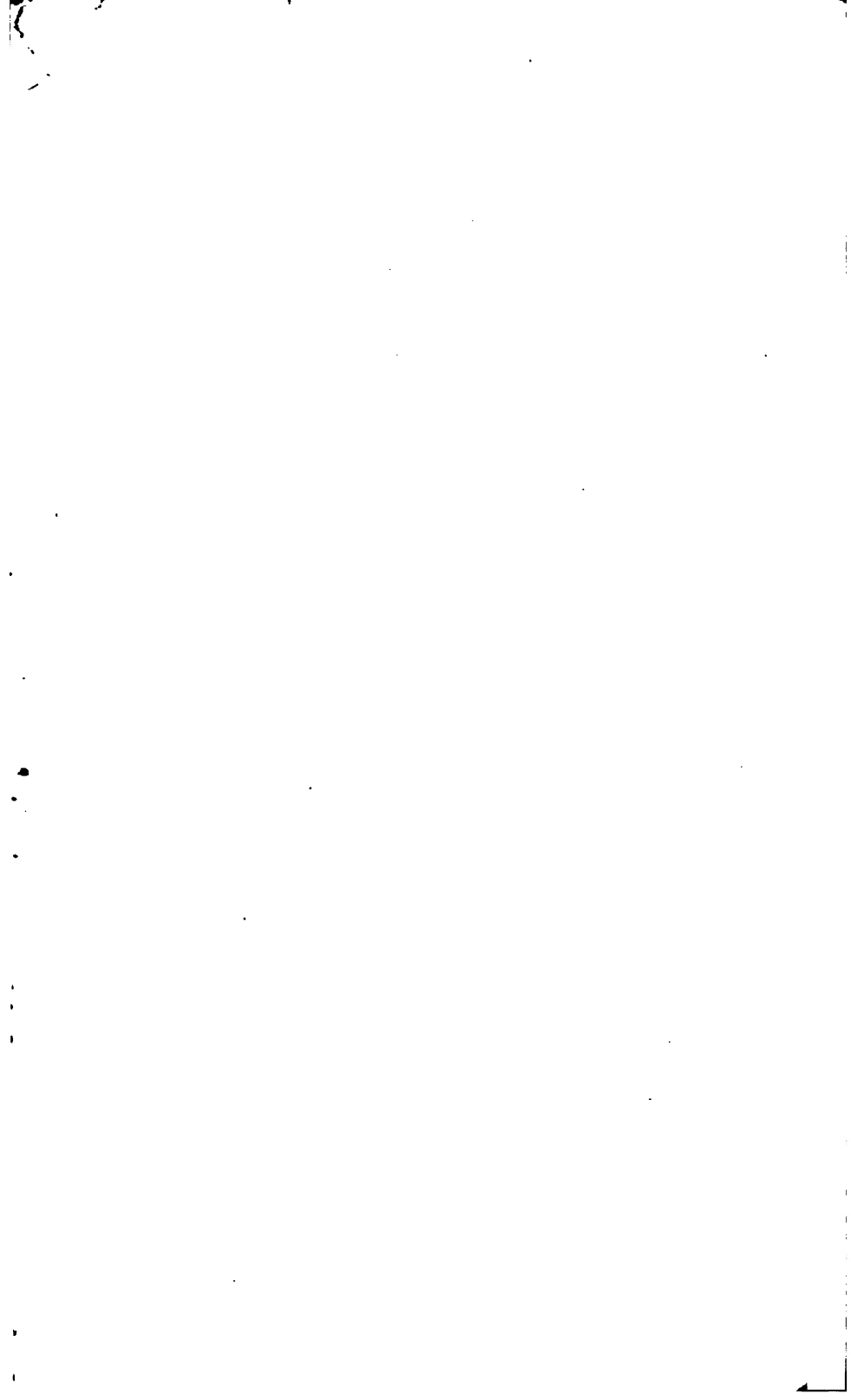
- Statistics of Normal Schools, Austria, 155; Oldenburg, 523; Prussia, 424; United States, 648; Zurich, 356.
- Statistics of Universities, &c., 184, 536, 592, 696.
- Stearns, E. S., History of Normal School, 661.
- Stenography, 500.
- Stevens, Thaddeus, 56.
- Story, Joseph, Harvard as it was, 190.
- Stockwood, pro-gymnasium, 277.
- Studies, Elementary, Austrian Schools, 147; Oldenburg, 520; Zurich, 532.
- Studies, Secondary, Austria, 147, 164; Oldenburg, 520; Prussia, 495, 502; Zurich, 352, 345.
- Studies, Polytechnic, 389.
- Studies, University, 368.
- Studies and Conduct, Sir Mathew Hale, 77.
- Studies and Methods, discussions of, 27.
- Supplementary Schools, 36.
- Supern, 440.
- Switens, Gerhard Van, 181.
- Switzerland, Area, Population and Schools, 524.
- Synod of Teachers, 317, 554.
- Sybel, Prof. H. Von, on German Universities, 595.
- Switchine, Madame, Early Rising and Method, 640.
- Tanya Schools in Hungary, 176.
- Tappan, (Master,) 218.
- Teachers of Normal schools, Boutwell, 701.
- Bullock, 671; Mann, 696; Washburn, 678.
- Teachers of Public Schools, 702.
- True Dignity of, 847.
- Professional Training of, xxxi., 345, 434, 657.
- References to Authors on, 30.
- Schools for, 89, 857, 800.
- Portraits of, 40.
- Austria, 141; Canada, 592; Oldenburg, 522; Prussia, 414, 484, 646; Zurich, 347, 550; United States, 657.
- Teachers of Gymnasiums and Superior Schools, 463.
- Examination, Prussia, 404; Austria, 165, 169; Zurich, 317.
- Appointment, 474; Rank, 470; Absence from School, 472; Discharge, 472; Pension, 474.
- Teaching as a Profession, 663, 676, 795.
- Teachers' Seminaries, for Austria, 123.
- Oldenburg, 523; Prussia, 486.
- Zurich, 355, 361, 545.
- Teachers, Appointment of, Austria, 146.
- Prussia, 400; Zurich, 550.
- Teachers, Examination of, Austria, 145.
- Prussia, 474; Zurich, 345.
- Tennessee, 101; Constitution of 1835, 101.
- Textor's Epistles, 272.
- Terre Haute (Ind.) State Normal School, 731.
- Text-books, how selected, Austria, 162.
- Prussia, 504; Zurich, 345.
- Texas, 118; Constitution of 1845, 118.
- Teachers' Salaries, Austria, 147; Oldenburg, 522.
- Thiersch, F., Tribute to Prussian Schools, 444.
- Thinking, Faculty for, 599.
- Theological Schools in Austria, 184.
- Topffer on Ornamental Studies, 633.
- Thun, (Count.) Ministry of, Prussia, 141.
- Tilden, Caroline E., 667.
- Tradescent, John, 315.
- Training and Teaching, 413.
- Trade School in Oldenburg, 523.
- Transylvania, Public Schools, 170, 174.
- Trial year, of Gymnasial Teachers in Prussia, 499.
- Trivial Schools, Austria, 181.
- Trumbull, John, Portrait of Schoolmaster, 218.
- Tuition Fee in Austria, 153.
- Zurich, 542; Switzerland, 249.
- Tyrol, Statistics of, 157.
- United States, Constitution of, 41; Land Policy, 65.
- Area in Square Miles and Acres, 77.
- Land Grants to Colleges, Schools and Univ's, 78.
- Universal Education in Prussia, 645.
- University Education, 83.
- National, 41; Illinois, 146; Kentucky, 164.
- University in Zurich, 337.
- Universities in Austria, 185; England, 594.
- France, 690; Prussia, 595; Zurich, 358, 537.
- University and Gymnasium, relations of, 154, 599.
- University, conditions for matriculation, 154.
- Upham, C. W., Report on Academics, 575.
- Ushers, Duty of, and Platform of Teaching, 225.
- Vacations in Austria, 152.
- Oldenburg, 521; Prussia, 504.
- Vermont, 90; Constitution of 1777, 91.
- State Normal Schools, 739.
- Vernacular Language, 421.
- Veterinary School in Zurich, 544.
- Virginia, 84; Constitution of 1851, 96.
- Early School History, 94.
- Visitation day in Connecticut, 220.
- Vocation, Education for, 493, 536.
- Von Kampts, 442.
- Von Riniptode, in 1832, 449.
- Von Muehler, 447.
- Von Raumer and Prussian System, 446.
- Von Sybel, 596.
- Voters unable to read and write, 51.
- Voting, right of, 88, 123.
- Washington, George, Educational views, 42.
- Message of 1790, National University, 42.
- Letter to Hamilton, 43; Farewell Address, 44.
- Letter to Commissioners of Federal District, 44.
- Letter to Jefferson, 45; Gov. Brooke, 47.
- Resolution of Assembly of Va., 47.
- Provision of Last Will, 48.
- Watts, I., Labor for Children, 123.
- Way, Elizabeth, 188.
- Webster, Daniel, Tribute to his Teacher, 218.
- Webster's Spelling Book, 220.
- Westfield (Mass.) State Normal School, 681.
- Plan of Building, 682.
- West Liberty, (W. Va.), Normal School at, 306.
- Westphalia, Province of, 454.
- West Virginia, 122; Constitution, 122.
- Normal School, 706.
- White, E. E., Report on Normal Schools, 795.
- Widows and Orphans of Teachers, 553.
- Wiese, D., 446.
- Wilmington, (Del.) Normal School at, 807.
- William I. of Prussia, 903.
- Winona (Minn.) Normal School, 731.
- Winne, E. C., Normal School, 727.
- Winterthur, Switzerland, City Schools of, 353.
- Wisconsin, State, 117; Constitution, 117.
- Normal School Policy, 755, 758.
- State University, 211, 233, 755.
- Wollner, 433.
- Women, Example of Studious, 624.
- Education and Employment for, 623.
- Pursuits, 626; Plan of Life, 638.
- Woodbridge, W. C. and Normal Schools, 663.
- Woodbridge, William, 559.
- Wolf, F. R., 475.
- Woolworth, S. B., in 711.
- Work, Habit of, in Girls, 634.
- Writing Masters, 315.
- Year, Scholastic, in Austria, 108; Prussia, 503.
- Ypsilanti State Normal School, 719.
- Youngs, Master, 555.
- Zedlitz and the Prussian Schools, 437.
- Zurich, Canton, 337; city of, 353.
- Primary Schools, 341.
- Elementary Schools, 343, 531.
- Repetition Schools, 344.
- Secondary Schools, 351, 357, 535.
- Cantonal Schools, 540.
- Superior Schools, 354, 360, 537.
- Veterinary School, 538, 544.
- Agricultural School, 359, 547.
- Normal School, 361, 545; University, 363, 537.
- Polytechnic School, 369, 377.
- School Code of 1859, 527.

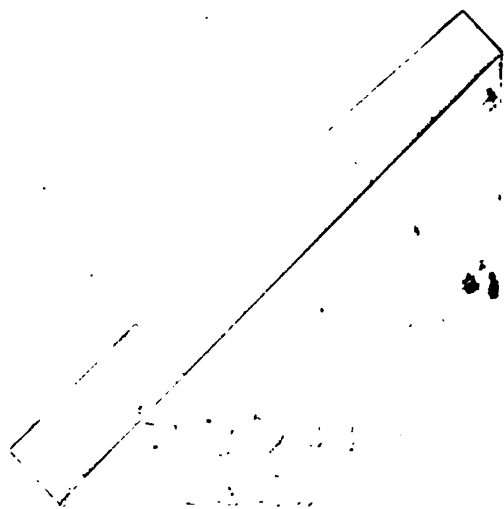












1954